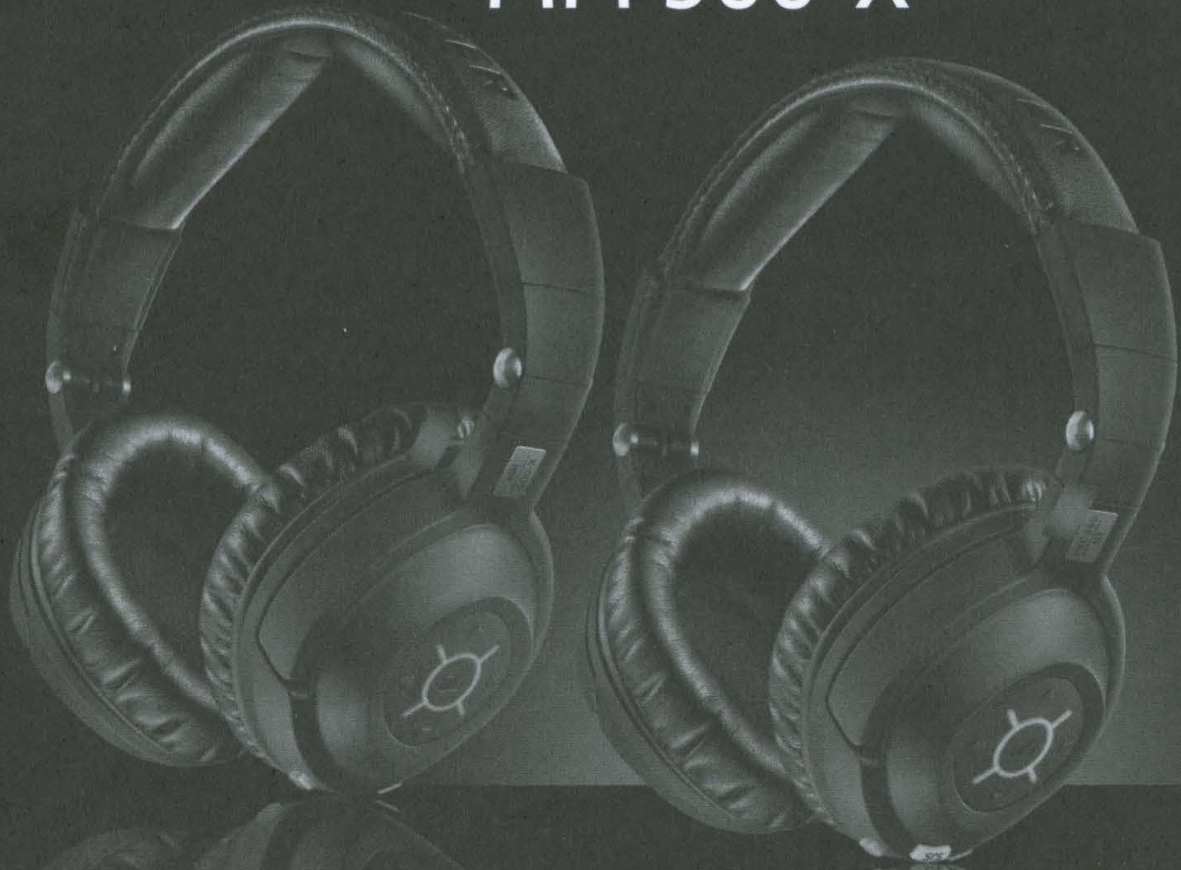
MM 550-X
MM 500-X



Quick guide
Kurzanleitung
Guide rapide
Instrucciones resumidas
Guida rapida
Beknopte handleiding

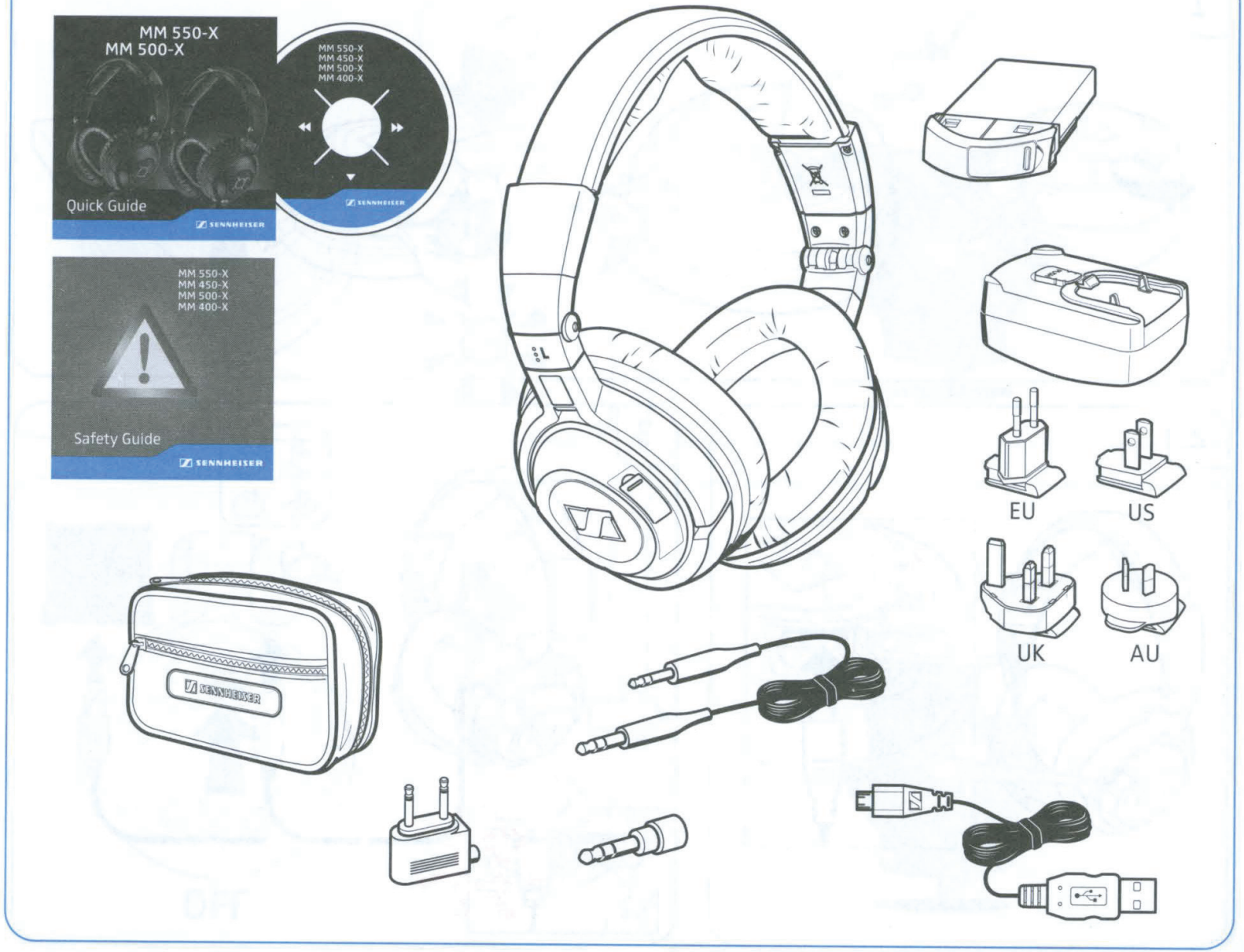
Guida rápido
クイックガイド
Краткая инструкция
Krótka instrukcja obsługi
Hızlı Kılavuz
快速指南

快速指南
빠른 안내서
Panduan ringkas

SENNHEISER

Delivery includes | Lieferumfang | Contenu | Volumen de suministro | Dotazione | Leveringsomvang | Itens fornecidos | 同梱品 | Объем поставки | Zakres dostawy | Teslimat Kapsamı | 供货范围 | 包装内容 | 구성품 | Isi Kemasan

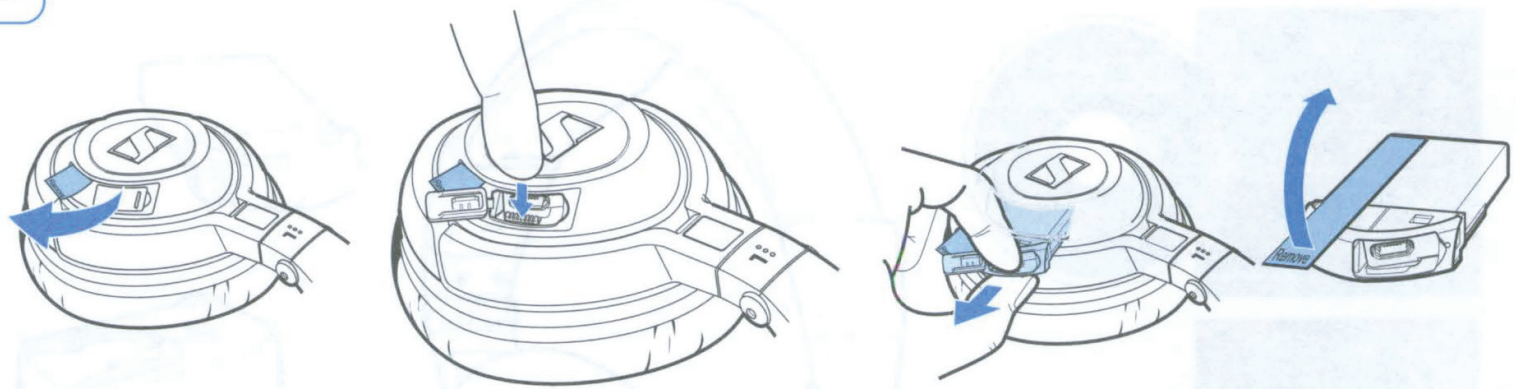
MM 550-X
MM 500-X



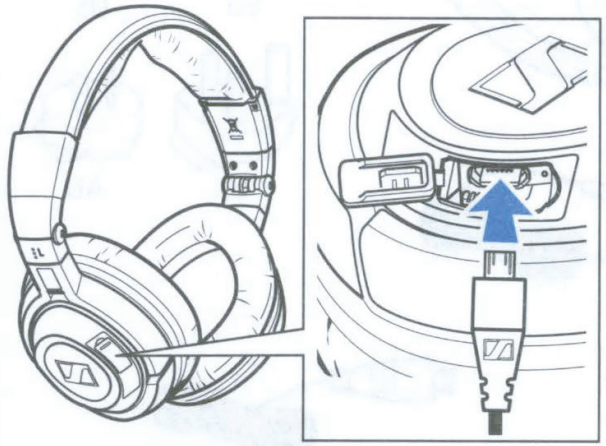
Charging the headset/battery pack | Akku laden | Charger le pack batterie | Cargar la pila recargable | Caricamento della batteria | Accu laden | Carregar a pilha acumuladora | バッテリーを充電する | Зарядка аккумулятора | Ładowanie akumulatora | Akünün şarj edilmesi | 给电池充电 | 充電 | 배터리 충전하기 | Mengisi daya baterai

MM 550-X
MM 500-X

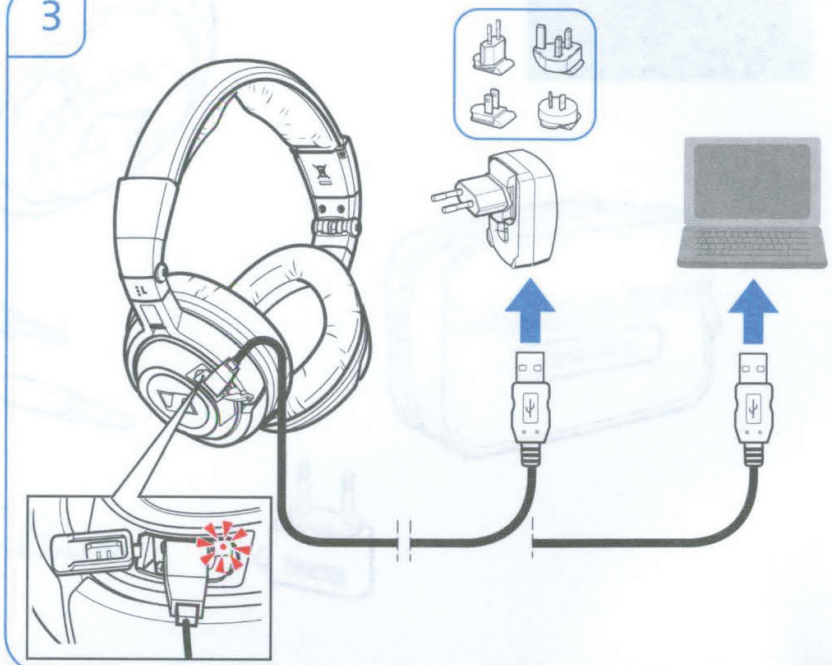
1



2

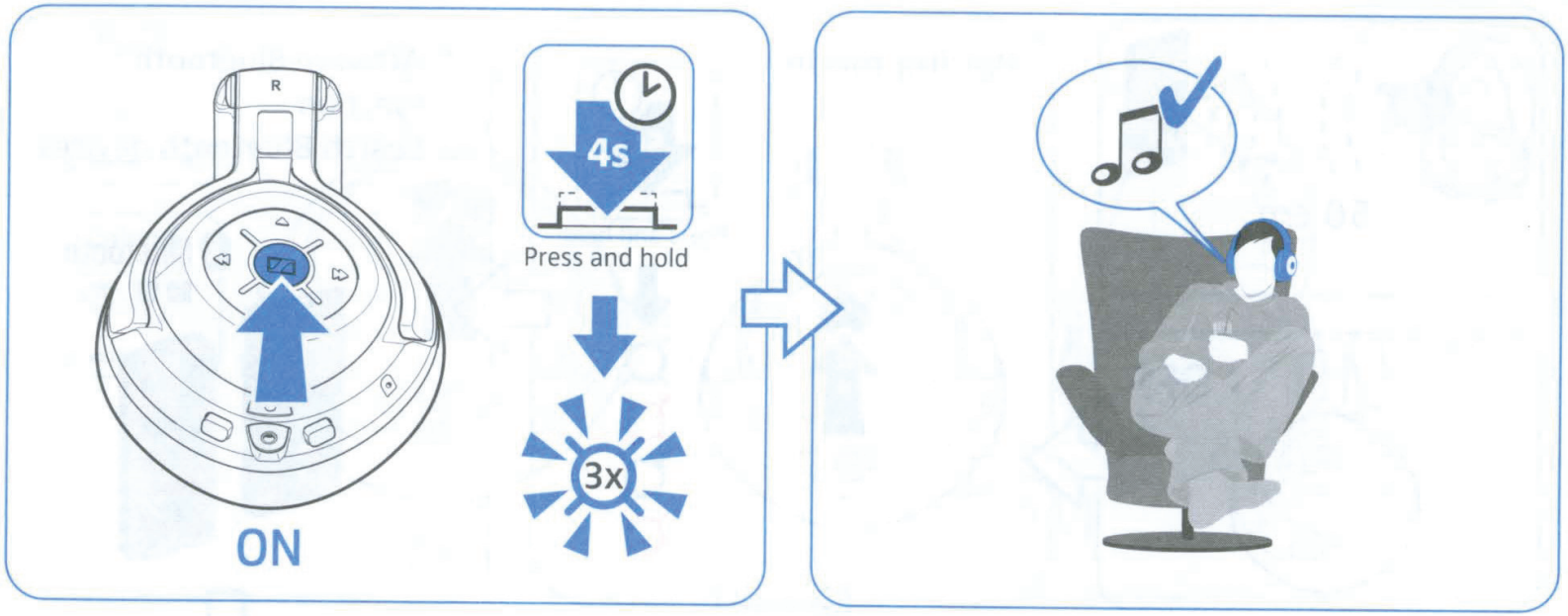


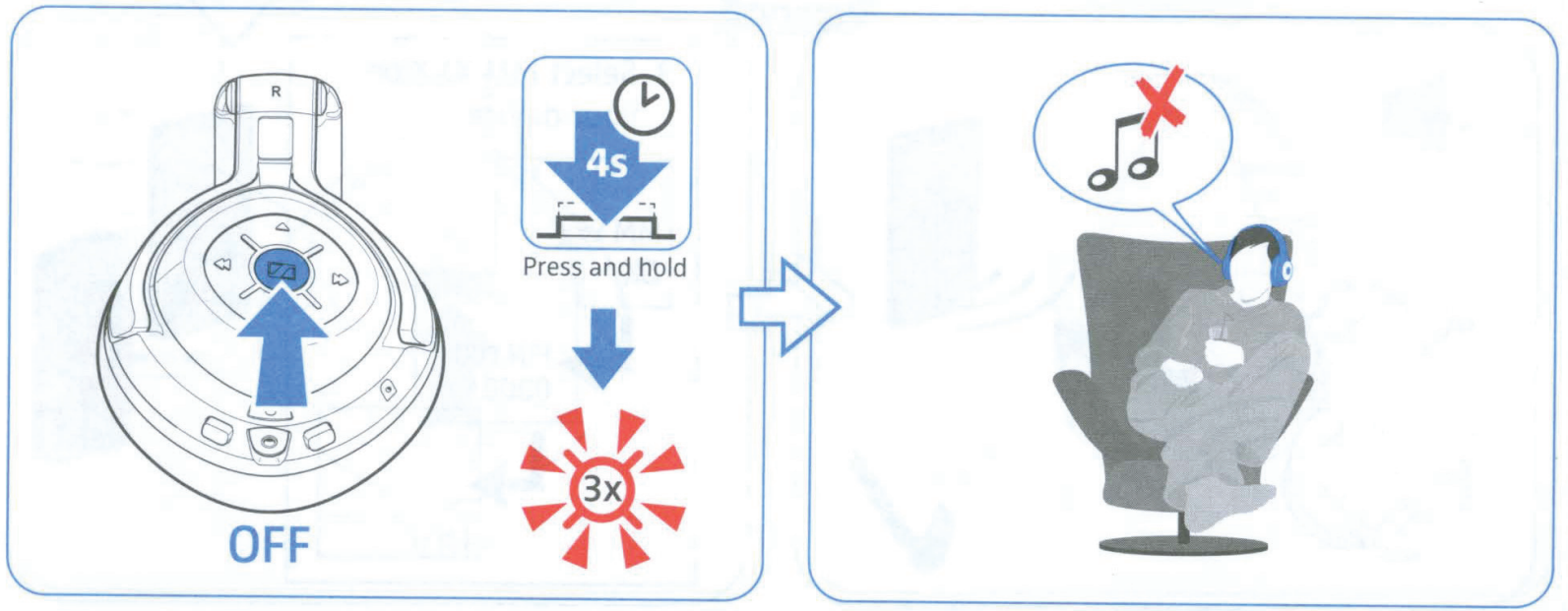
3



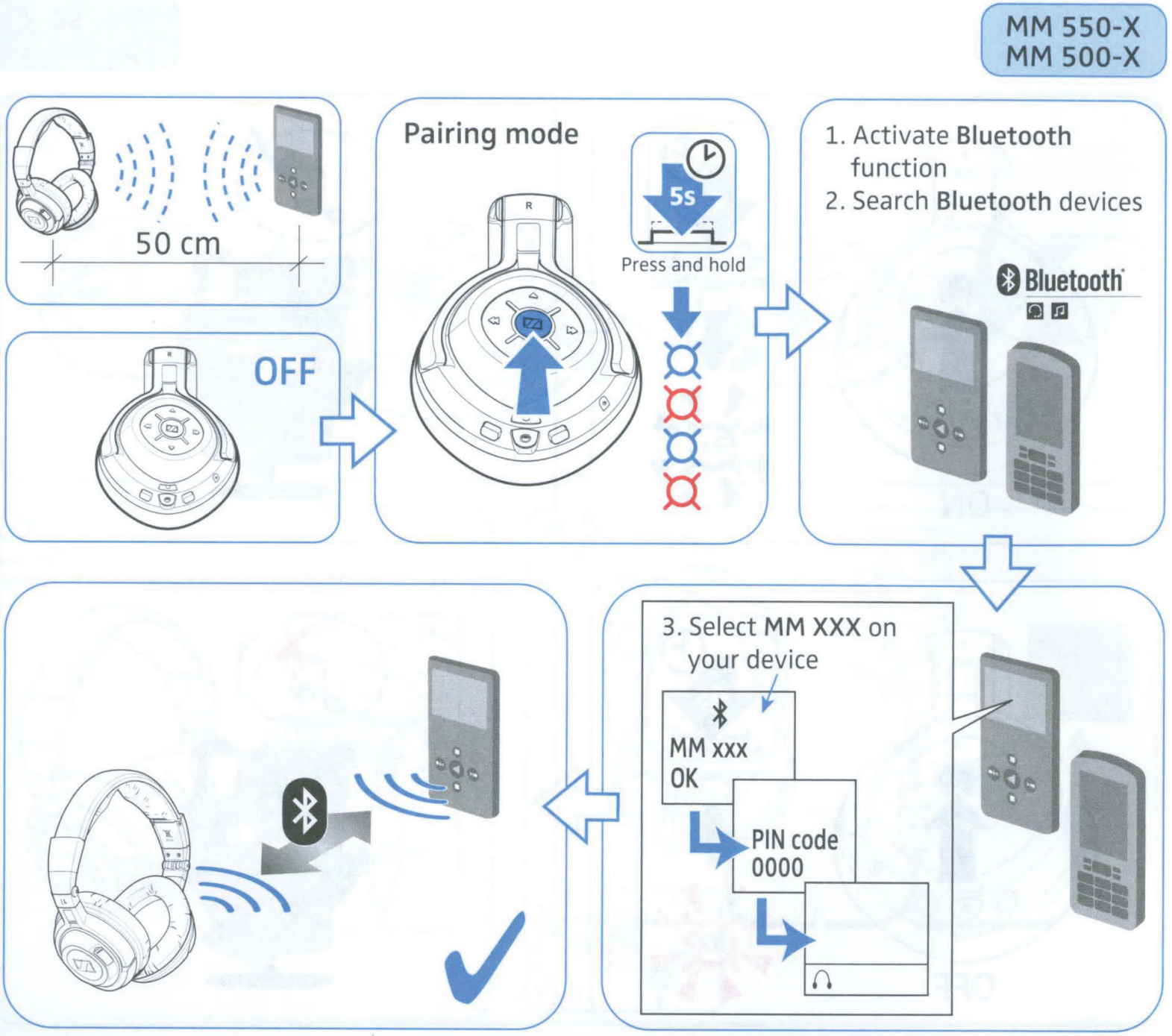
Switching the headset on/off | Headset ein-/ausschalten | Allumer/éteindre le casque-micro | Encender/apagar el headset | Accensione/spegnimento dell'headset | De headset in-/uitschakelen | Ligar/desligar os micro-auscultadores | ヘッドセットをオン/オフにする | Включение и выключение головного комплекта | Włączanie / wyłączanie zestawu słuchawkowego | Kulaklık setinin açılması/kapatılması | 打开/关闭通讯耳机 | 開啟/關閉耳機 | 헤드셋 끄고 켜기 | Mengaktifkan/menonaktifkan headset

MM 550-X
MM 500-X



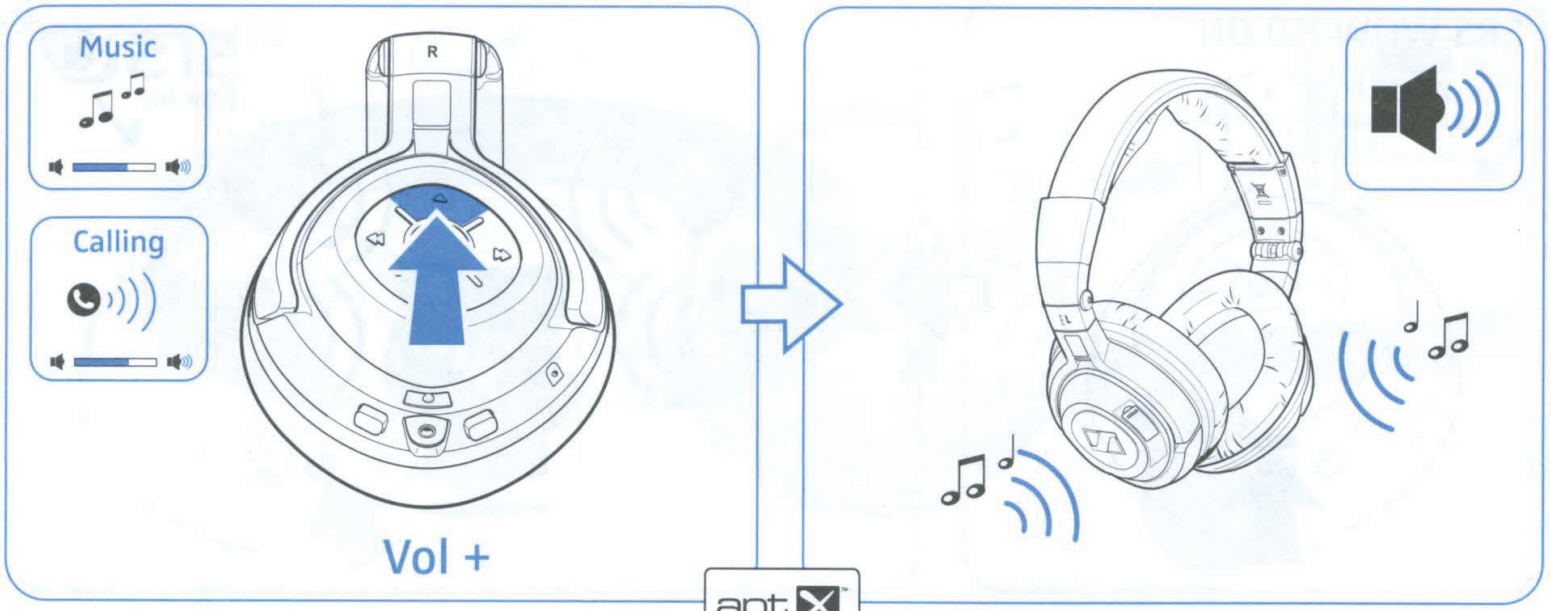


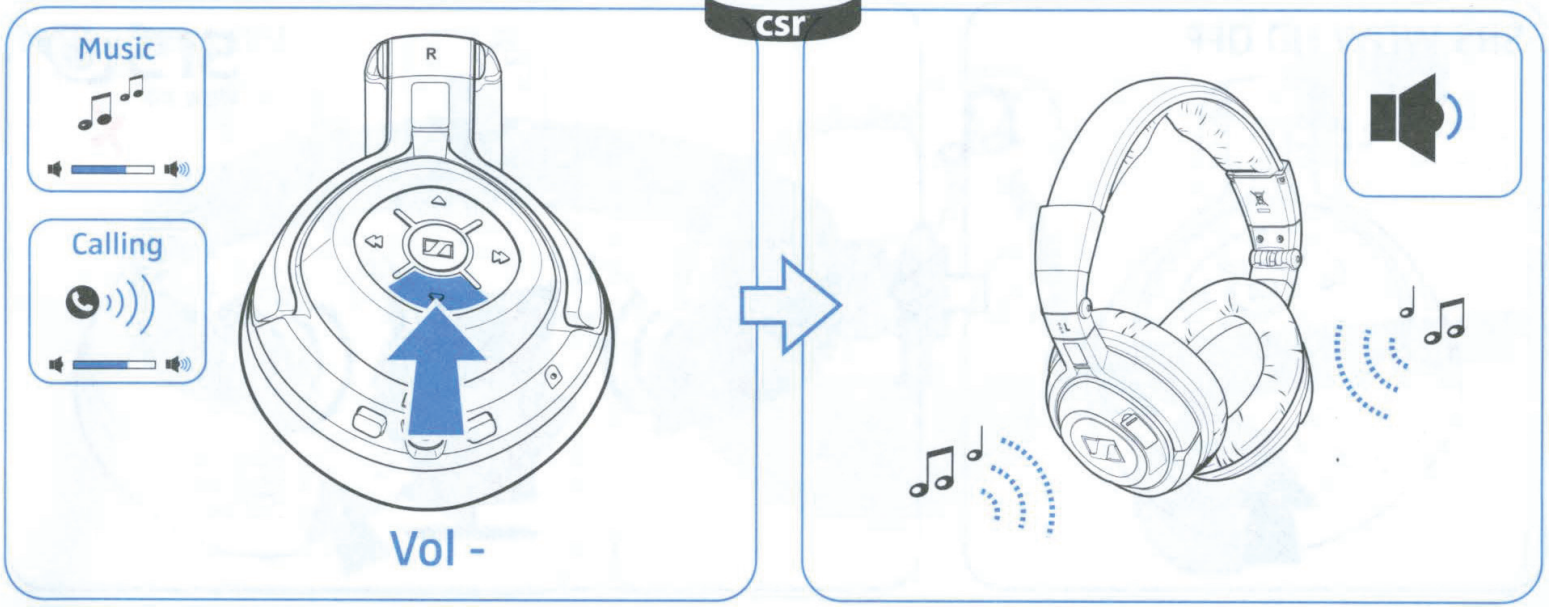
Pairing the headset | Headset verbinden | Appairer le casque-micro | Conectar el headset | Connessione dell'headset | De headset verbinden | Ligar os micro-auscultadores | ヘッドセットを接続する | Присоединение головного комплекта | Łączenie zestawu słuchawkowego | Kulaklık setinin bağlanması | 连接通讯耳机 | 連接耳機 | 헤드셋 연결하기 | Menyambungkan headset



Adjusting the volume | Lautstärke einstellen | Régler le volume | Ajustar el volumen | Impostazione del volume | Volume instellen | Ajustar o volume | 音量を調節する | Регулировка громкости звука | Regulacja głośności | Ses şiddetini ayarlama | 调节音量 | 調整音量 | 볼륨 조절하기 | Mengatur volume suara

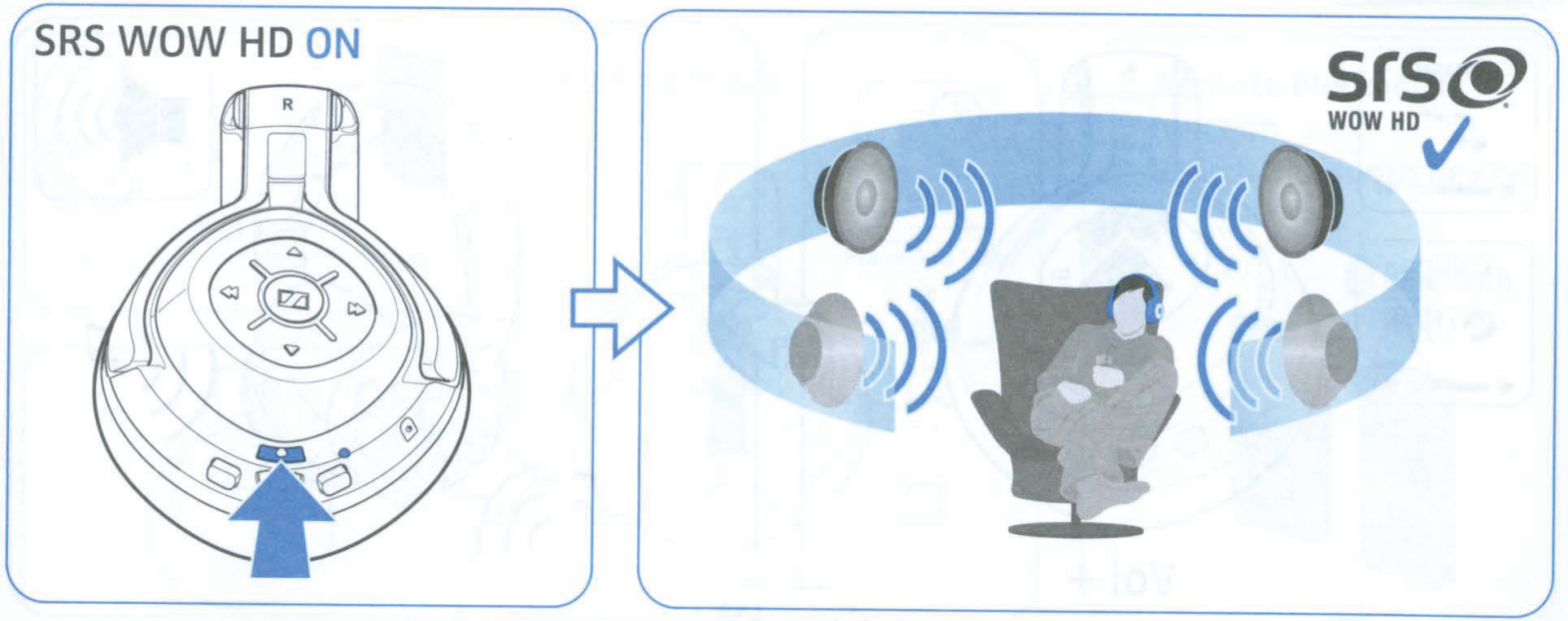
MM 550-X
MM 500-X

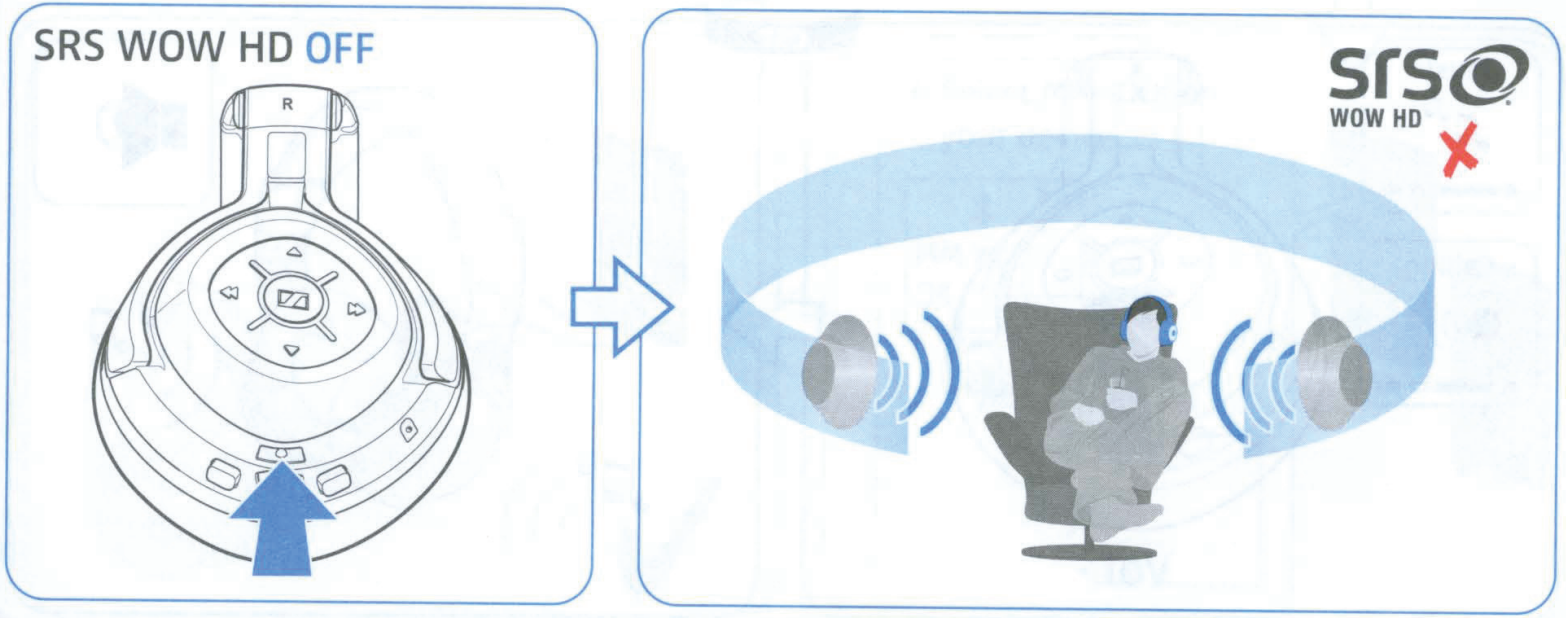




Activating/deactivating SRS WOW HD | SRS WOW HD ein-/ausschalten | Activer/désactiver la fonction SRS WOW HD | Activar/desactivar SRS WOW HD | Accensione/Spegnimento di SRS WOW HD | SRS WOW HD in-/uitschakelen | Ligar/desligar o sistema SRS WOW HD | SRS WOW HD をオン/オフにする | Включение и выключение SRS WOW HD | Włączanie / wyłączanie funkcji SRS WOW HD | SRS WOW HD işlevinin açılması/kapatılması | 启用/关闭SRS WOW HD 功能 | 開啟/關閉 SRS WOW HD | SRS WOW HD 켜고 끄기 | Mengaktifkan/menonaktifkan SRS WOW HD

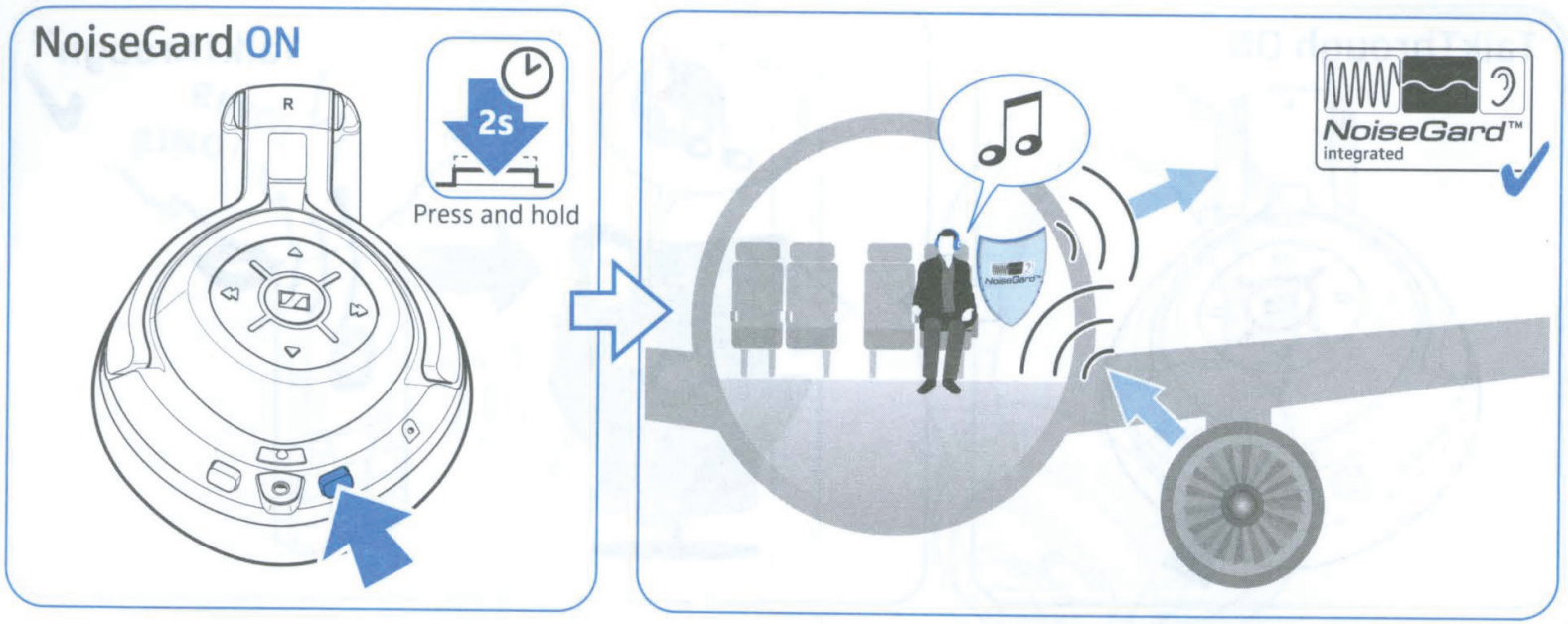
MM 550-X

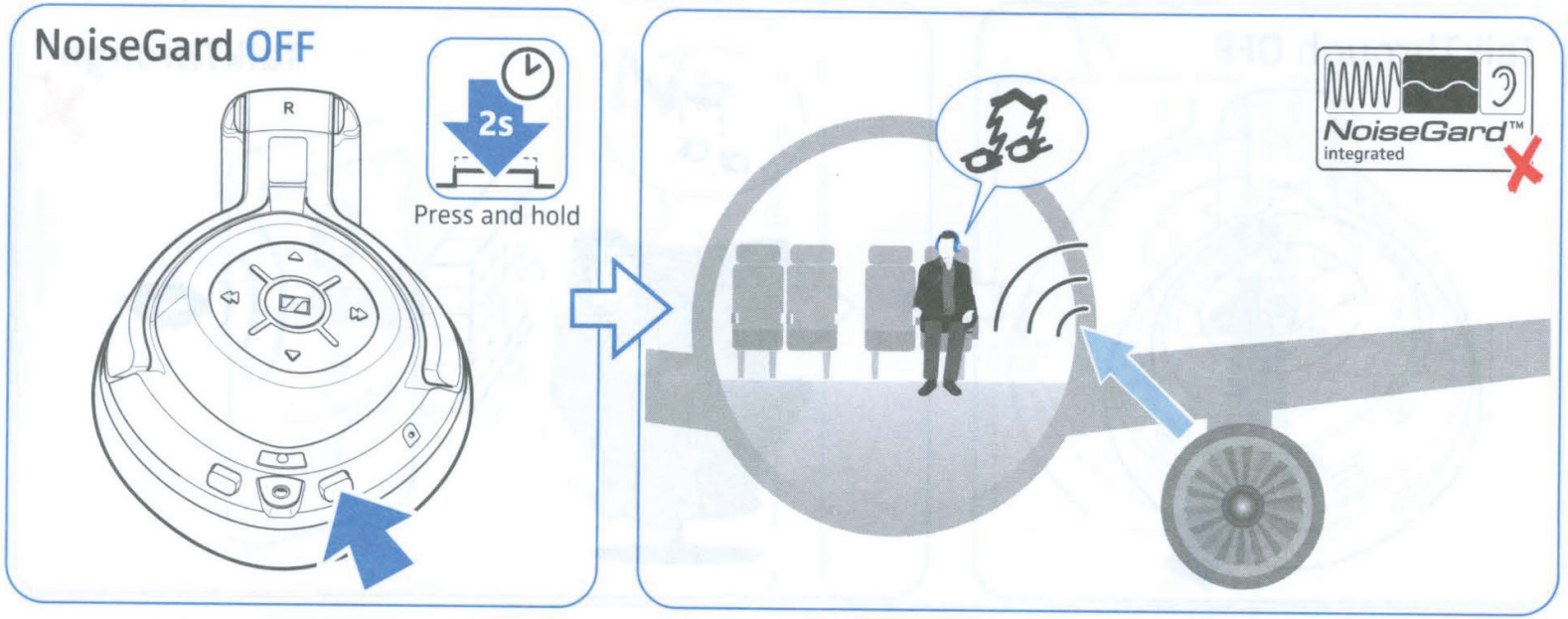




Activating/deactivating NoiseGard | NoiseGard ein-/ausschalten | Activer/désactiver NoiseGard | Activar/desactivar NoiseGard | Attivazione/disattivazione di NoiseGard | NoiseGuard in-/uitschakelen | Ligar/desligar NoiseGard | ノイズガードをオン/オフにする | Включение и выключение NoiseGard | Włączanie / wyłączanie funkcji NoiseGard | NoiseGard işlevinin açılması/kapatılması | 启用/关闭NoiseGard功能 | 開啟/關閉 NoiseGard 功能 | NoiseGard 끄고 켜기 | Mengaktifkan/menonaktifkan NoiseGard

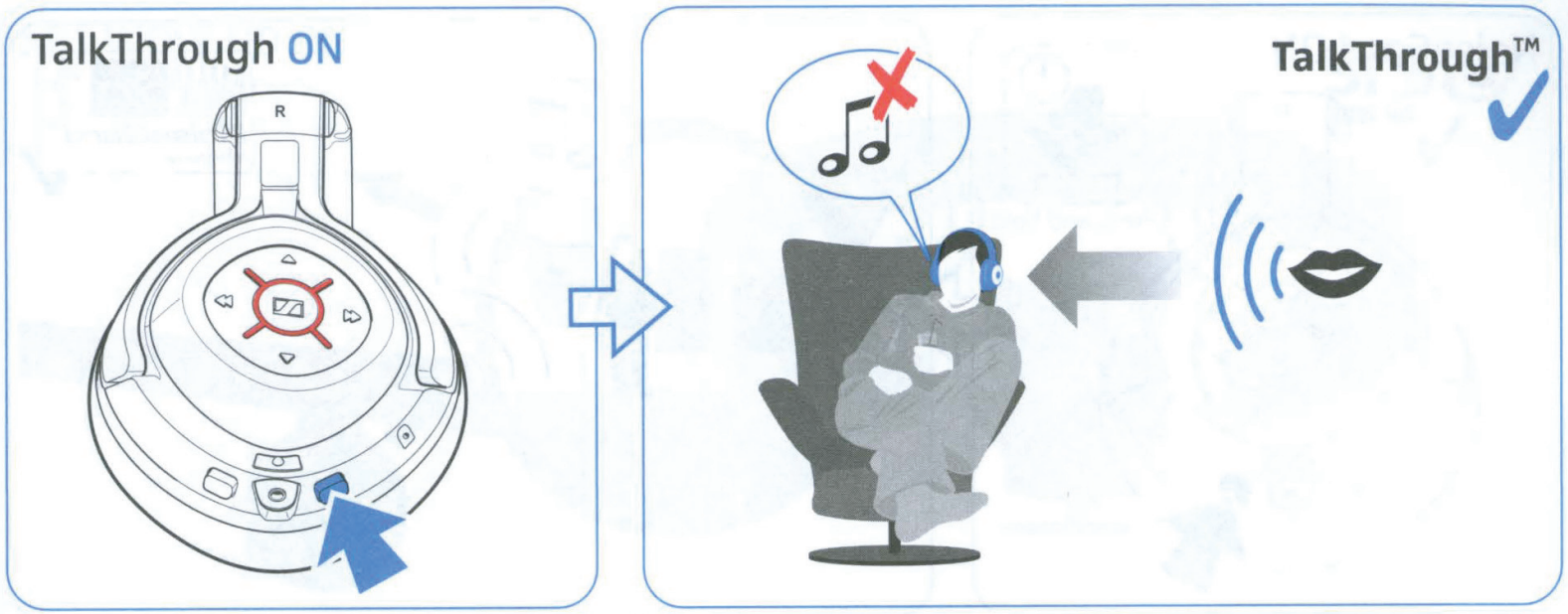
MM 550-X

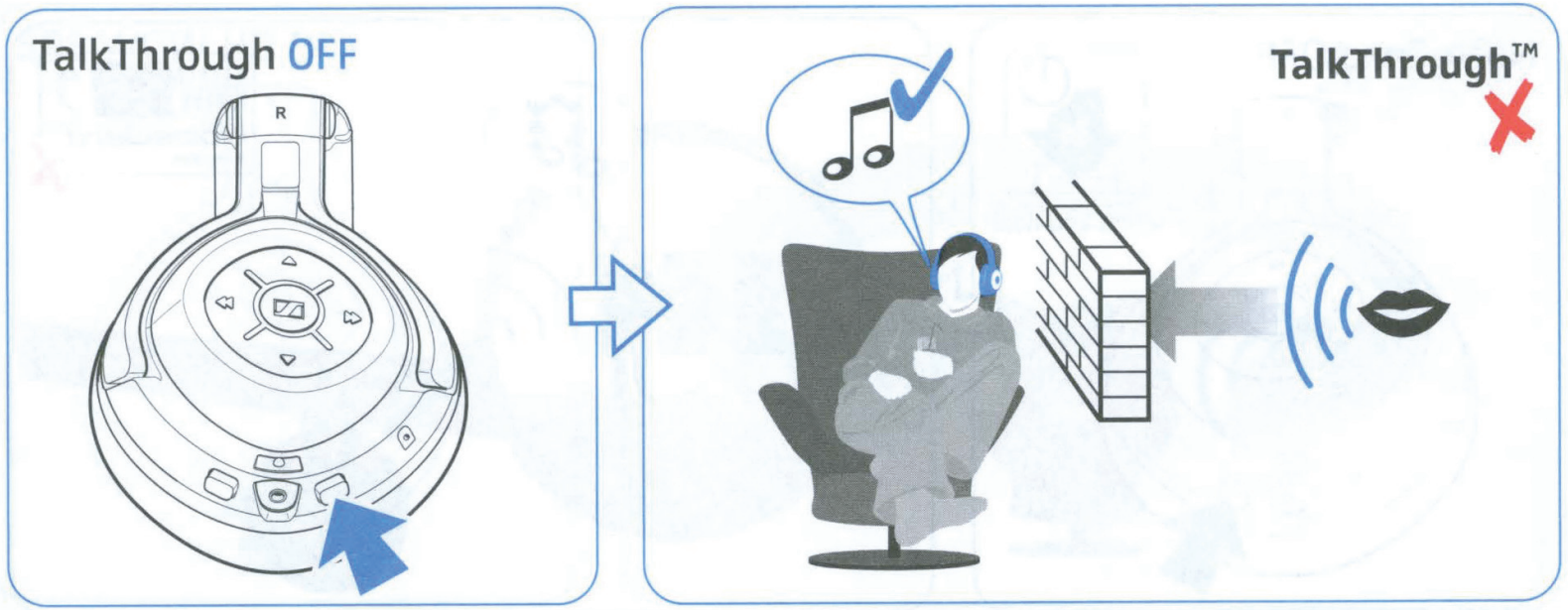




Activating/deactivating TalkThrough | TalkThrough ein-/ausschalten | Activer/désactiver TalkThrough | Activar/desactivar TalkThrough | Attivazione/disattivazione di TalkThrough | TalkThrough in-/uitschakelen | Ligar/desligar TalkThrough | トークスルーをオン/オフにする | Включение и выключение функции TalkThrough | Włączanie/wyłączanie funkcji TalkThrough | TalkThrough işlevinin açılması/kapatılması | 启用/关闭TalkThrough功能 | 開啟/關閉 TalkThrough 功能 | TalkThrough 끄고 켜기 | Mengaktifkan/menonaktifkan TalkThrough

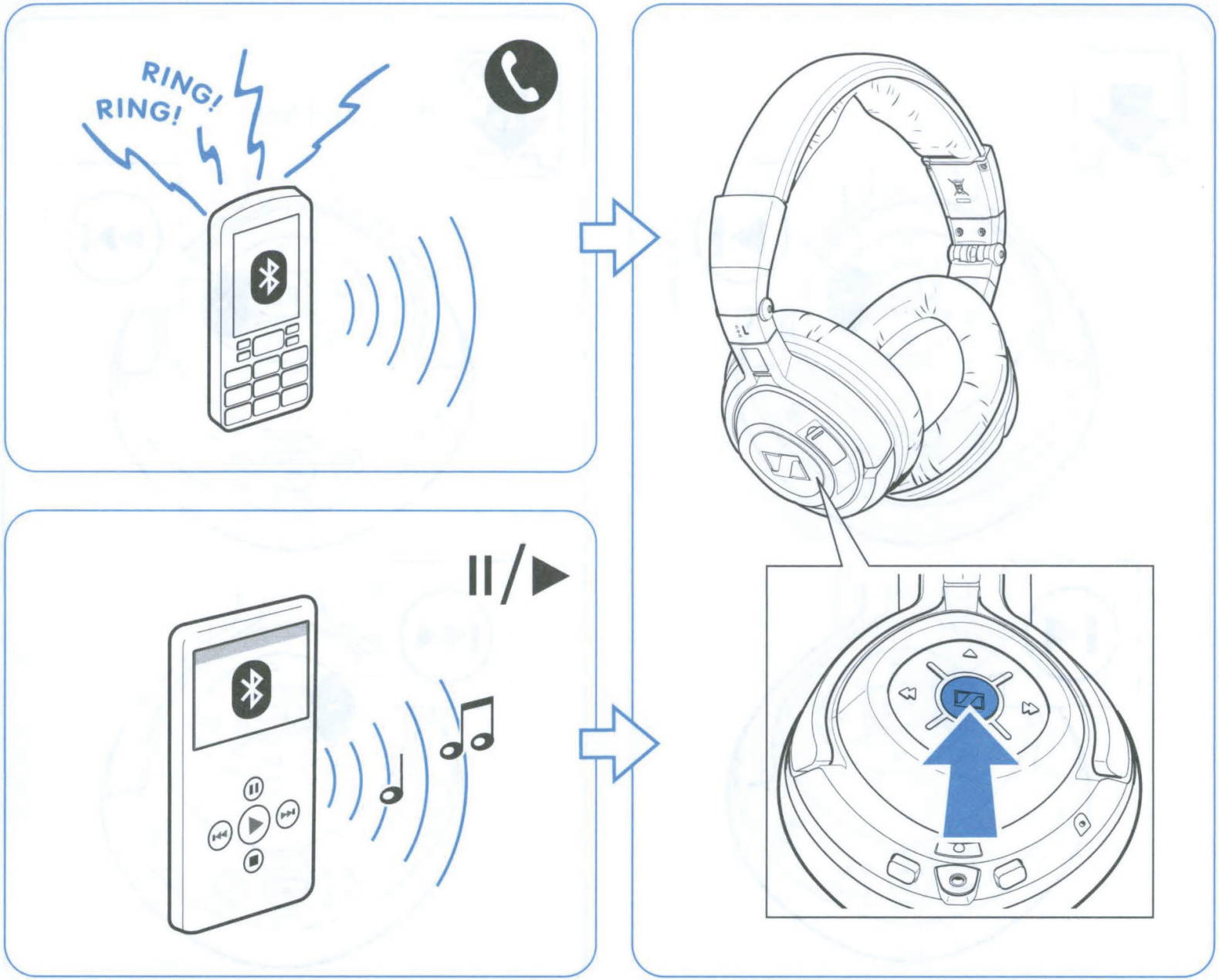
MM 550-X





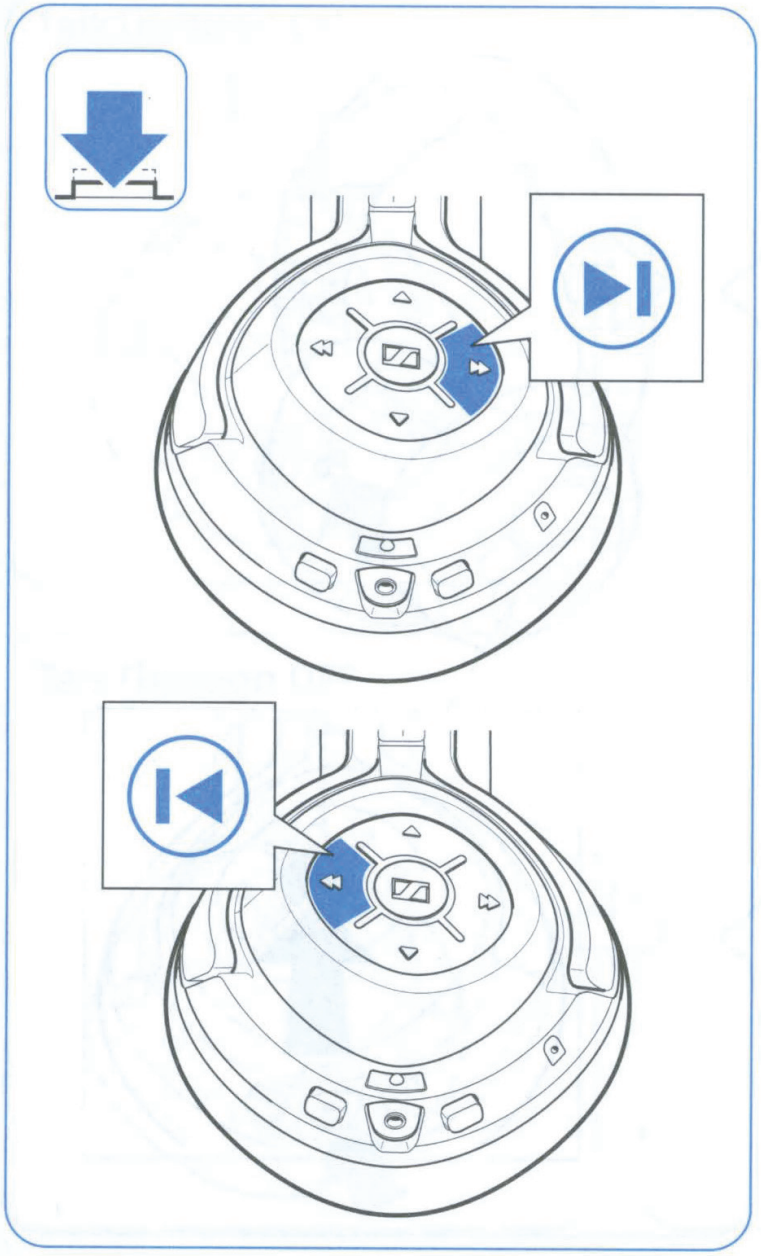
Accepting a call – Playing a track | Gespräch annehmen – Titel abspielen | Prendre un appel – Jouer un morceau | Aceptar la llamada – Reproducir títulos | Accettare una chiamata – Riproduzione di una traccia | Gesprek aannemen – nummer afspelen | Atender a chamada – reproduzir faixa | 通話を受ける－タイトルを演奏する | Прием вызова – воспроизведение произведения | Przyjmowanie rozmowy – odtwarzanie utworu | Görüşmeyi kabul et – Parçayı oynat | 接听来电－播放曲目 | 接受來電 – 播放曲目 | 통화 받기 – 곡 재생하기 | Menerima panggilan – Memutar trek

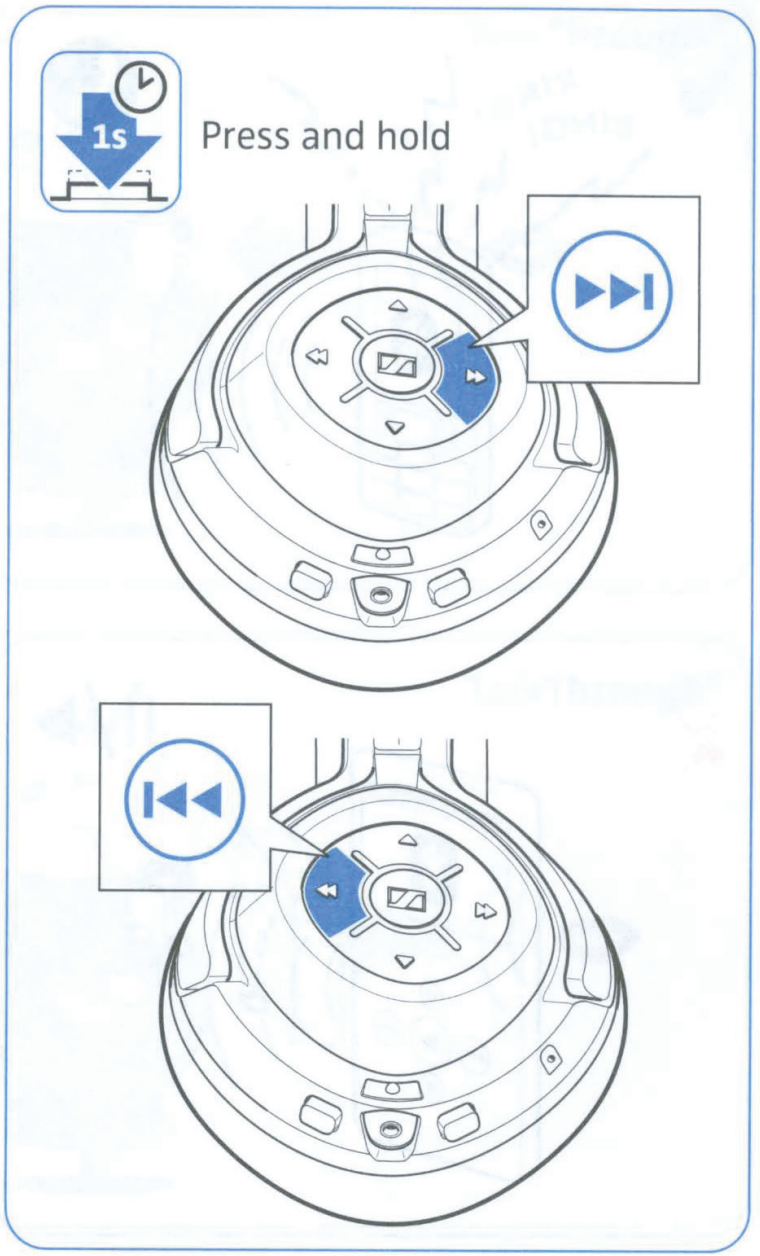
MM 550-X
MM 500-X



Changing track / Rewinding a track | Titel wechseln – Titel vor-/zurückspulen | Changer de morceau – Avancer/rembobiner un morceau | Cambiar de título – Avance/retroceso rápido del título | Cambio traccia – Traccia precedente/successiva | Van nummer wisselen – nummer vooruit-/terugspoelen | Passar para uma nova faixa – avanço/retrocesso rápidos | タイトルを変更する－タイトルを送る/戻す | Смена произведения – перемотка произведения вперед/назад | Zmiana utworu – przewijanie utworu do przodu / wstecz | Parça değiştirme – Parça ileri/geri sarma | 选放曲目，快进/回放曲目 | 切換曲目 – 前進快轉/倒退快轉曲目 | 곡 교체 – 곡 앞으로/뒤로 감기 | Mengganti trek – Memutar trek maju/mundur cepat

MM 550-X
MM 500-X





SENNHEISER

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MM 500-X

Instruction manual

SENNHEISER

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Important safety instructions

- Read this instruction manual carefully and completely before using the product.
- Always include this instruction manual when passing the product on to third parties.
- Do not use an obviously defective product.

Preventing damage to health and accidents

- Do not listen at high volume levels for long periods of time to prevent hearing damage.
- Always maintain a distance of at least 3.94'' (10 cm) between the ear cups and the cardiac pacemaker or implanted defibrillator since the product generates permanent magnetic fields.
- Keep the product, accessory and packaging parts out of reach of children and pets who could swallow smaller pieces.
- Do not use the product in an environment that requires your special attention (e.g. in traffic).

Preventing damage to the product and malfunctions

- Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation.
- Only clean the product with a soft, dry cloth.
- Switch off the product after use to conserve battery power. Remove the battery pack if the product will not be used for extended periods of time.
- Only use the product in environments where wireless **Bluetooth**® transmission is permitted.
- Only use attachments/accessories supplied or recommended by Sennheiser.

Intended use

The MM 500-X is a wireless **Bluetooth** headset that works with mobile phones or other **Bluetooth** devices/**Bluetooth** compliant devices and allows for wireless music enjoyment or calls.

''Improper use'' means using the product

- other than as described in this instruction manual,
- under operating conditions which differ from those described in this instruction manual.

Safety instructions for the Lithium-Polymer battery pack

If abused or misused, the battery pack may leak. In extreme cases, it may even present an explosion or fire hazard.

- Heat generation
- Fire development
- Explosion
- Smoke or gas development.

Please understand that Sennheiser does not accept liability for damage arising from abuse or misuse.

	Keep away from children.		When not using the product for extended periods of time, remove the battery pack from the product.
	Immediately remove the battery pack from an obviously defective product.		Only use battery packs recommended by Sennheiser.
	Dispose of the battery pack at special collection points or return it to your specialist dealer.		Switch battery pack-powered products off after use.
	Only charge the battery pack with the appropriate Sennheiser chargers.		When not using the battery pack for extended periods of time, charge it regularly (about every 3 months).
	Only charge the battery pack at ambient temperatures between 10°C/50°F and 40°C/104°F.		Do not heat above 70°C/158°F, e.g. do not expose to sunlight or throw into a fire.
	Do not mutilate or dismantle.		Do not continue to use a defective battery pack.
	Store charged battery packs so that the terminals cannot contact each other – danger of shorting out/fire hazard.		Do not expose to moisture.

MM 500-X

The MM 500-X is an accessory which allows for wireless music enjoyment when used with mobile phones or other **Bluetooth** devices/**Bluetooth** compliant devices. Its circumaural and closed design makes the MM 500-X especially suitable for use with in-flight entertainment systems.

Bluetooth

The MM 500-X complies with the **Bluetooth** 2.1 standard. Via its **Bluetooth** interface, it can be connected to a wide variety of **Bluetooth** enabled devices. Bluetooth wireless technology allows the MM 500-X to communicate with your **Bluetooth** enabled device (e.g. mobile phone, MP3 player, PC or PDA) within a range of up to 10 meters.

apt-X

With apt-X audio coding, you can be assured of crisp, pure and full stereo sound. It allows you to not only hear, but experience and feel the audio as it was intended. Utilizing apt-X, **Bluetooth** technology can now offer wireless audio quality that is indistinguishable from the highest quality wired connection.

From major public broadcasters to film production studios, apt-X is used throughout the world to transmit high quality digital audio from A to Z in real-time. It was developed to meet the exacting standards of musicians and audio engineers who love the exceptional dynamic range and high fidelity it provides.

Now available on selected consumer devices, the apt-X technology ensures that music lovers everywhere can stream the rich listening experience that only apt-X can deliver.

Additional features

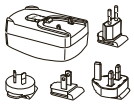
- Great for travel: comfortable, rugged and foldable headset construction
- Optional connection via audio cable for music enjoyment without **Bluetooth** technology
- Outstanding sound quality due to Duofol diaphragms

Delivery includes

MM 500-X headset

BA 370 PX battery pack

USB charging cable



Mains unit with country adapters

Stereo audio cable
(2.5 mm to 3.5 mm jack plug)

Audio adapter
(3.5 mm jack socket to ¼'' (6.35 mm) jack plug)

In-flight adapter
(3.5 mm jack socket to 3.5 mm double mono jack plug)

Transport case

Quick start guide incl. CD ROM with detailed instruction manual as PDF

Safety guide

Manufacturer Declarations

A list of accessories can be found on the MM 500-X product page at www.sennheiser.com.

For information on suppliers, contact your local Sennheiser partner: www.sennheiser.com > ''Service & Support''

Overview of the pictograms

Meaning of the pictograms for pressing a button

Pictogram	Meaning
	Briefly press this button.
	Keep this button pressed for 4 seconds.
	Keep this button pressed until the desired setting is made or the desired action is completed.

Meaning of the pictograms for the flashing of the LED

Pictogram	Meaning
	This pictogram symbolizes a flashing.
	This pictogram symbolizes an interruption.
	This pictogram symbolizes an interval.
	This pictogram symbolizes a continuous flashing.

Examples of some of the pictograms that are used throughout this instruction manual:

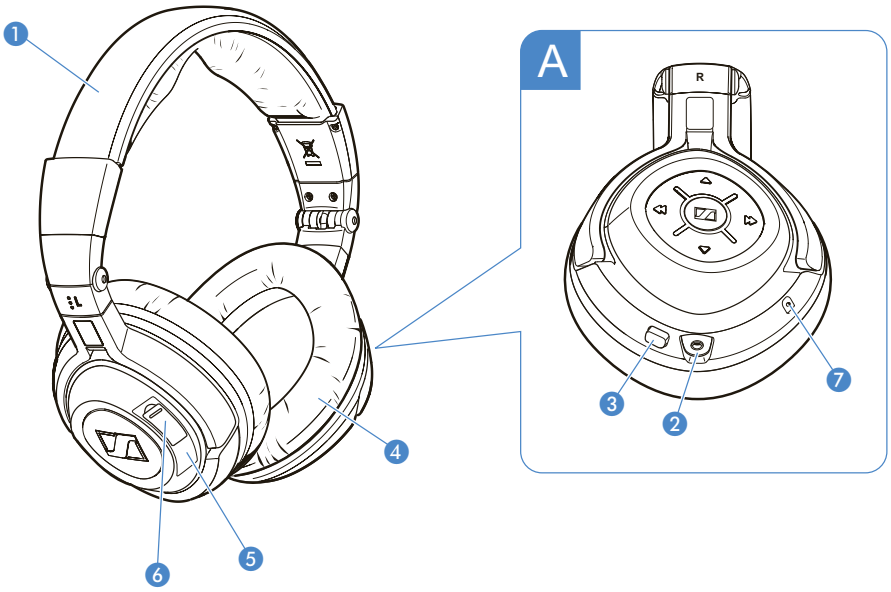
Pictogram	Meaning
	The LED flashes once every 3 seconds.
	The LED flashes 3 times per second.
	The LED flashes in a rhythmic sequence.
	The LED flashes blue 3 times and then goes off.

The pictogram “i”

This note provides important information!

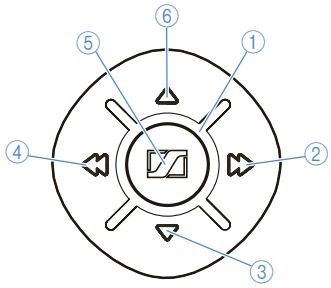
Notes marked with the pictogram “i” provide important information on the use of the headset.

Product overview



1. Headband
2. Socket for audio cable
3. Bluetooth button
4. Ear pad
5. Battery pack compartment
6. Socket for charging cable
7. Microphone

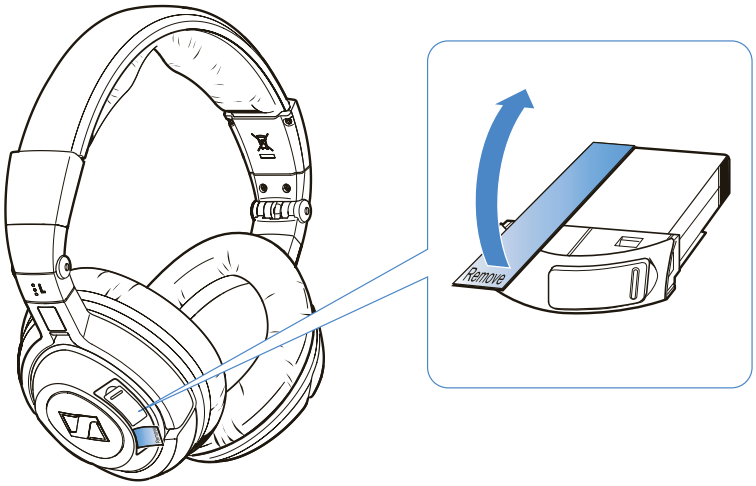
A Operating panel



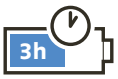
① LED
② Fast-forward ⏩ button
③ Volume ▼ button
④ Rewind ⏪ button
⑤ Master button
⑥ Volume ▲ button

Putting the MM 500-X into operation

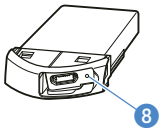
- Before using the MM 500-X for the first time, remove the protection strip from the battery pack.



Charging the battery pack



- Before using the battery pack for the first time, charge it for at least 3 hours. The battery pack can also be charged inside the headset during operation.



When charging the battery pack, the LED 8 on the battery pack lights up red. When the battery pack is fully charged, the LED 8 on the battery pack lights up green.

When the battery pack is almost flat, the LED 1 flashes red. You hear a short, descending acknowledgement tone.

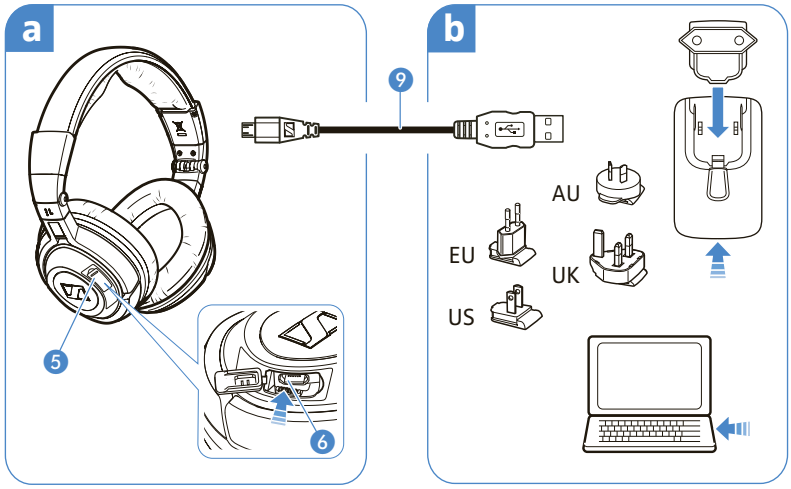
The operating time of the battery pack depends on the device settings, the listening situation and the audio sources used.

Type of use	Operating time
Bluetooth technology	10 hours

Remove the battery pack if the headset will not be used for extended periods of time.

Possibilities of charging the battery pack

First, connect the charging cable 9 to the battery pack as described in section a and then connect the charging cable 9 to a power source as described in section b.



a

Connecting the charging cable to the battery pack

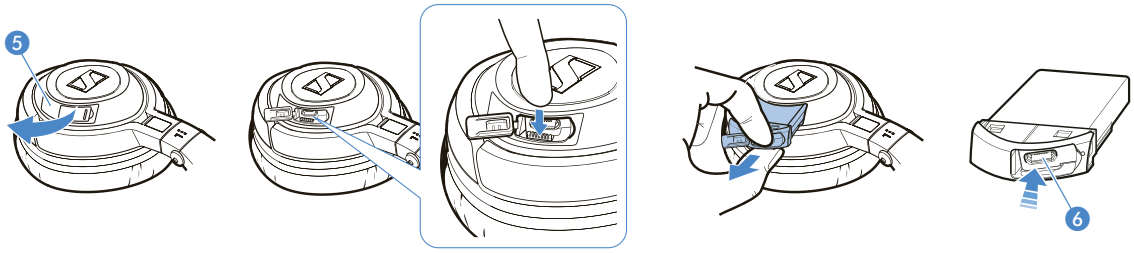
You can charge the battery pack either inside or outside the headset. This is helpful if you are using a spare battery pack (to be ordered separately).

To charge the battery pack inside the headset:

- Open the cover of the battery pack compartment 5 on the left ear cup.
- Connect the charging cable 9 to the socket for charging cable 6 on the headset.

To charge the battery pack outside the headset:

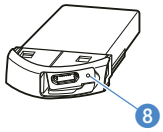
- Open the cover of the battery pack compartment 5 on the left ear cup.
- Press the button next to the battery pack compartment and remove the battery pack.



- Connect the charging cable 9 to the socket for charging cable 6 on the battery pack.

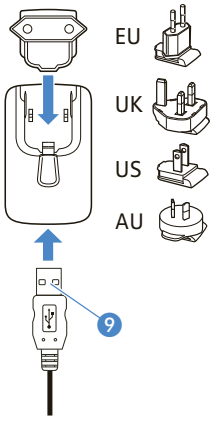
b Connecting the charging cable to the mains unit, to a PC or to other USB devices

In order to charge the battery pack, you can connect the charging cable to either the USB socket of your PC or the supplied mains unit or to other USB devices.



To connect the charging cable to a PC:

- Connect the USB plug of the charging cable 9 to the USB socket of your PC.
  The battery pack is being charged. The LED 8 on the battery pack lights up red.



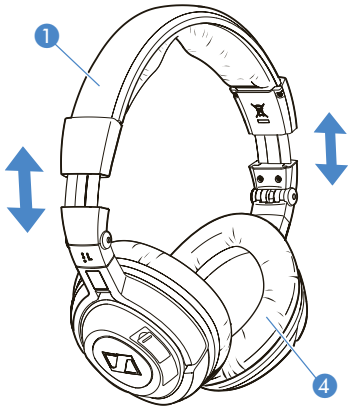
To connect the charging cable to the mains unit:

- Connect the charging cable 9 to the mains unit.
- Plug the suitable country adapter onto the mains unit.
- Plug the mains unit into a wall socket.
  The battery pack is being charged. The LED 8 on the battery pack lights up red.
- After charging, unplug the mains unit from the wall socket.

If you have charged the battery pack outside the headset:

- Insert the charged battery pack into the headphone's battery pack compartment until it locks into place.
- Close the cover of the battery pack compartment 5.

Adjusting the headband



For optimum transmission quality, good noise attenuation and best possible comfort, the headband has to be adjusted to properly fit your head:

- Wear the headset so that the headband 1 runs over the top of your head.
- Adjust the length of the headband so that
  – the ear pads 4 rest comfortably against the ears,
  – you feel even, gentle pressure around your ears,
  – a snug fit of the headband 1 on the head is ensured.
- To ensure maximum noise attenuation, final adjustment is best made in a noisy environment.

Connecting the MM 500-X to the audio source

CAUTION

Danger of malfunction due to radio waves!

The transmitted radio waves of mobile phones can impair the operation of sensitive and unprotected devices.

- Only use the headset in environments where wirless **Bluetooth** transmission is permitted.

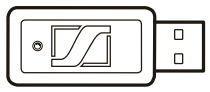
The headset complies with the **Bluetooth** 2.1 standard. In order that data can be transmitted wirelessly using **Bluetooth** technology, you have to register your headset with your audio source (pairing).

The headset can save the connection profiles of up to 8 **Bluetooth** devices with which it has been paired. After switch-on, the headset automatically connects to one of these devices.

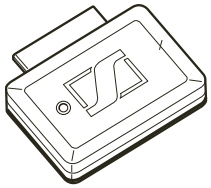
If you pair the headset with a ninth audio source, the saved connection profile of the first **Bluetooth** device will be overwritten. If you want to re-establish a connection with the first audio source, you have to pair the headset with this audio source again.

- If your audio source does not have a **Bluetooth** interface, use an optional dongle.

BTD 500 USB



BTD 300i



For an optimum listening experience, your audio source has to support the A2DP profile.

Pairing the MM 500-X with an audio source

- ▶ Make sure that your headset is switched off (see "Switching the MM 500-X on/off" on page 14).

When switching the headset on for the first time, it will automatically go into pairing mode. The headset is waiting to be paired with a **Bluetooth** enabled device.

- ▶ Press the Master button ⑤ and keep it pressed until the LED ① alternately flashes blue and red.
- ▶ On your audio source, activate the **Bluetooth** function "Add a new device".
- ▶ Proceed as described in the instruction manual of the audio source.

If a suitable audio source is found, the devices will exchange device identification information. The LED ① flashes 3 times blue and you hear an ascending beep. The devices have identified each other and the headset is paired with the audio source.

PIN code

When the audio source prompts for a password or PIN code, enter the default PIN code "0000".

If no device is found within approx. 5 minutes, the LED ① flashes 3 times red and you hear a descending beep. The headset will then try for 3 minutes to connect to one of the up to 8 previously paired audio sources. If this fails, the headset automatically switches off after 60 minutes.

- ▶ In this case, repeat the necessary steps to pair the headset with the audio source again.

Disconnecting the Bluetooth connection

The Bluetooth button ③ is backlit, indicating the current setting. The backlighting goes off after a short time to conserve energy.

- ▶ Press any button on the headset to display the current setting of the **Bluetooth** function.

To disconnect the **Bluetooth** connection to the audio source, you can switch off the headset or the **Bluetooth** function. This setting is retained until the **Bluetooth** function is switched on again.

To switch the headset off:

- ▶ Press the Master button ⑤ and keep it pressed until the LED ① flashes 3 times red.
  You hear a descending beep. The **Bluetooth** connection is automatically deactivated. The headset switches off.

To switch the **Bluetooth** function off:

- ▶ Press the Bluetooth button ③ and keep it pressed until the LED ① flashes 3 times red. You hear a descending beep.
  The Bluetooth button ③ goes off. The **Bluetooth** function is switched off.

Connecting the MM 500-X using the audio cable

Connecting the audio cable

You can connect the headset to the audio source using the audio cable if:

- you do not want to use the **Bluetooth** function,
- you are not allowed to use the **Bluetooth** function (some airlines do not allow **Bluetooth** transmission)

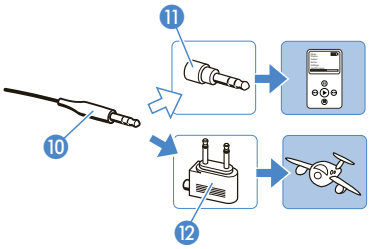
  or

- the battery pack is flat.

When the audio cable is connected to the headset, the **Bluetooth** function cannot be switched on.

If the headset is already connected to the audio source via the **Bluetooth** interface, the **Bluetooth** connection is automatically disconnected when you connect the audio cable. The LED ① flashes 3 times red and you hear a descending beep.

▶ Connect the 2.5 mm jack plug of the audio cable to the socket ② of the headset.



▶ Connect the 3.5 mm jack plug of the audio cable ⑩ to

- the headphone socket of your audio source or
- the audio adapter for ¼" (6.35 mm) jack socket ⑪ if the 3.5 mm jack plug of the audio cable is too small or
- the in-flight adapter ⑫ if you want to use the headset with an in-flight entertainment system.

When the audio cable is connected to your audio source, you hear the sound from your audio source and the LED ① flashes blue.

Detaching the audio cable

If you only want to use the MM 500-X as a **Bluetooth** headset, you can detach the audio cable ⑩.

▶ Pull the 2.5 mm jack plug of the audio cable ⑩ from the socket ② of the headset.

When detaching the audio cable, the **Bluetooth** function is not automatically switched on.

▶ Switch the **Bluetooth** function on again (see "Switching the **Bluetooth** function on/off" on page 15).

Switching the MM 500-X on/off

WARNING

Danger of hearing damage!

Listening at high volume levels for long periods can lead to permanent hearing defects.

- ▶ Before putting the headset on, set the volume to a low level.
- ▶ Do not continuously expose yourself to high volumes.

Switching the MM 500-X on

- ▶ Press the Master button ⑤ and keep it pressed until the LED ① flashes blue. You hear an ascending beep.
  - – When switching the headset on for the first time, it will automatically go into pairing mode.
    The headset is waiting to be paired with a **Bluetooth** enabled device (see page 12).
  - – When the headset is already paired with an audio source, the **Bluetooth** connection is automatically established.
    You hear an ascending beep and then you hear your audio source.
  - – When the headset is already paired with an audio source but the audio source is switched off or out of range, the LED ① flashes blue.
    The headset will try for 3 minutes to connect to one of the up to 8 previously paired audio sources. If this fails, the headset automatically switches off after 60 minutes.

Switching the MM 500-X off

- ▶ Press the Master button ⑤ and keep it pressed until the LED ① flashes 3 times red.

You hear a descending beep. The **Bluetooth** connection is automatically deactivated. The headset switches off.

Using the MM 500-X

The headset has a **Bluetooth** function for wireless connectivity. Depending on the listening situation, you can switch this function on or off.

If your audio source supports apt-X, the MM 500-X will automatically stream music wirelessly in high-quality mode (apt-X). If your audio source does not support apt-X, music will be streamed in standard quality mode (SBC).

Switching the Bluetooth function on/off

Via the **Bluetooth** interface, the headset can be connected to a wide variety of **Bluetooth** enabled devices.

To switch the **Bluetooth** function on:

- Press the Bluetooth button 3 and keep it pressed until the LED ① flashes 3 times blue. The **Bluetooth** function is switched on.

To switch the **Bluetooth** function off:

- Press the Bluetooth button 3 and keep it pressed until the LED ① flashes 3 times red. You hear a descending beep.
  The Bluetooth button 3 goes off. The LED ① flashes blue and the **Bluetooth** function is switched off.

Changing the volume

The MM 500-X allows you to change the volume of the audio signal during a call or while listening to music:

Button	Duration	Function	
			Incrementally increases the volume
			Incrementally reduces the volume
			Continuously increases the volume
			Continuously reduces the volume

If you press the respective button briefly, the volume is changed incrementally; if you hold down the button, the volume is changed continuously.

When the minimum or maximum volume is reached, you hear an acknowledgement tone.

Remote-controlling connected devices from the MM 500-X

You can directly remote-control any device supporting the AVRCP profile and connected to the MM 500-X by using the buttons on the headset. Please refer to the instruction manual of your audio source for information on whether your device supports the AVRCP profile.

Remote-controlling the audio source from the MM 500-X

If your headset has a **Bluetooth** connection to an audio source (e.g. mobile phone, iPod, MP3 or CD player), you can use the MM 500-X to remote-control the audio source as follows:

Button	Duration	Function	
			Plays the track
			Stops the track (acknowledgement tone)
			Skips to the next track
			Skips to the previous track
			Fast-forwards the track *
			Rewinds the track *

* These functions are not supported by all connected **Bluetooth** devices.

Managing calls

When your MM 500-X is connected to a mobile phone and you receive a call, the LED ① flashes blue 3 times per second. You can also hear the ring tone of your mobile phone, if your mobile phone supports this function.

If your mobile phone automatically transfers the call to the headset, you hear a beep in the headset. If your mobile phone does not automatically transfer the call to the headset, you have to press a button on your mobile phone to transfer the call (see the instruction manual of your mobile phone).

▶ To manage your calls from your MM 500-X, press the Master button ⑤ or the Bluetooth button ❸:

Button	Duration	Function	
			Accepts the call
	2s		Rejects the call (acknowledgement tone)
			Ends the call
	5s		Transfers the ongoing call back to the mobile phone

Redialing

The redialing function must be supported by your mobile phone or **Bluetooth** device (with HF profile respectively) and be activated.

▶ To redial the last number from your MM 500-X, press the Bluetooth button ❸:

Button	Duration	Function	
	1s		Redials the last number (acknowledgement tone)
			Stops redialing

Voice dialing

The voice dialing function must be supported by your mobile phone (with HF profile) and be activated. Follow the instructions in the instruction manual of your mobile phone.

▶ To activate the voice dialing function from your MM 500-X, press the Bluetooth button 3:

Button	Duration	Function	
			Activates voice dialing
			Deactivates voice dialing

Muting the headset's microphone

▶ To mute the microphone on your MM 500-X, press the the Bluetooth button 3:

Button	Duration	Function	
			Activates the muting function (acknowledgement tone)
Any button			Deactivates the muting function

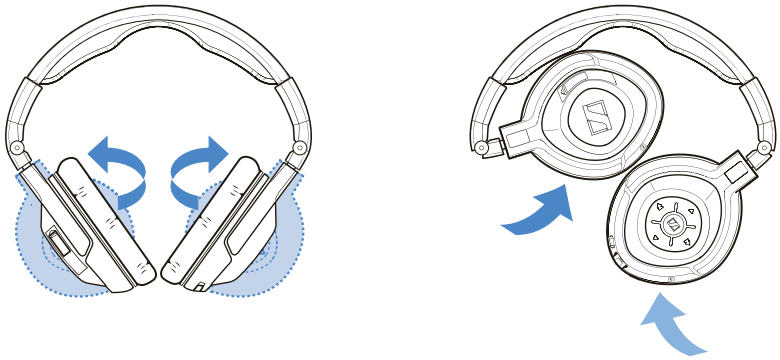
Switching the Bluetooth function off

If you press the Bluetooth button 3 too long, the **Bluetooth** function switches off!

Transporting the MM 500-X

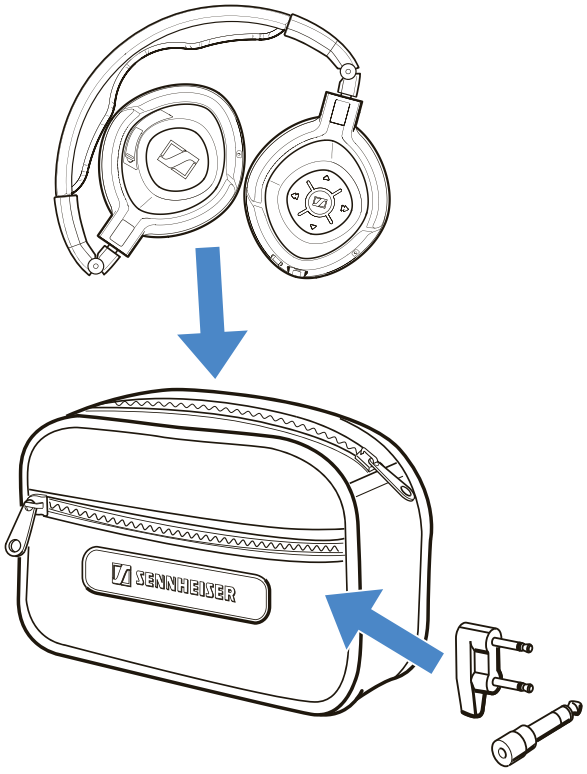
For space-saving transportation, the headset can be folded up flatly and compactly.

- ▶ Rotate the ear cups by 90°.
- ▶ Fold the ear cups inwards.
- ▶ Place the headset flat into the transport case.



Your accessories can be transported in the transport case:

- Audio adapter (¼" (6.35 mm) jack plug)
- In-flight adapter (3.5 mm double mono jack)



Cleaning and maintaining the MM 500-X

Cleaning the MM 500-X

CAUTION

Liquids can damage the electronics of the product!

Liquids entering the housing of the product can cause a short-circuit and damage the electronics.

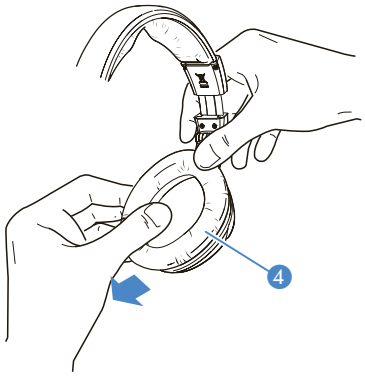
- Keep all liquids far away from the product.
- Do not use any solvents or cleansing agents.

For reasons of hygiene, you should clean the headset regularly:

- Before cleaning, make sure that the product is not recharged via the mains.
- Only use a dry and soft cloth to clean the product.

Replacing the ear pads

You can replace the ear pads. Spare ear pads are available from your Sennheiser partner or can be ordered at www.sennheiser.com under "Service & Support".



- Grasp the edge of the ear pad 4 behind the ear cup and peel it up and away from the ear cup.
- Slide the new ear pad 4 onto the ear cup.

If a problem occurs ...

Problem	Possible cause	Solution	Page
No operation indicator – headset cannot be switched on	The battery pack is flat.	Recharge the battery pack.	8
No audio signal when the audio cable is connected	The jack plug of the audio cable is not properly connected.	Check the connection to your audio source.	13
No audio signal during **Bluetooth** connection	The headset is switched off.	Switch the headset on.	14
	The headset is not paired with an audio source.	Check if the headset is paired. If necessary, pair the headset with the audio source again.	12
	The **Bluetooth** function on the headset is switched off.	Switch the **Bluetooth** function on the headset on.	15
	The audio cable is connected to the headset.	The connection of the audio cable automatically switches off the **Bluetooth** connection. Remove the audio cable and then switch the **Bluetooth** function on again.	13
	The volume is adjusted too low.	Increase the volume.	15
Headset cannot be paired	The pairing does not work.	Check if the audio source supports the A2DP profile. If not, use one of the optional dongles.	–
	The audio source is switched off.	Switch the audio source on.	11
Headset do not react to any button press	The operation of the headset is faulty.	Remove the battery pack from the headset. Reinsert the battery pack into the headset. Switch the headset on again.	–
Bluetooth connection is suddenly interrupted	The **Bluetooth** button has been pressed too long.	Switch the **Bluetooth** function on.	15

If a problem occurs that is not listed in the above table or if the problem cannot be solved with the proposed solutions, please contact your Sennheiser partner for assistance.

To find a Sennheiser partner in your country, search at www.sennheiser.com.

Resetting the settings of the MM 500-X

You can reset all settings of your headset to the factory default settings. This allows you to prevent that other users of the headset can access your **Bluetooth** enabled devices. You can then pair five new devices with the headset.

- Press the Master button ⑤ and keep it pressed until the LED ① flashes 3 times red. The headset switches off (see "Switching the MM 500-X off" on page 14).

- Press the Master button ⑤ and keep it pressed until the LED ① alternately flashes blue and red.

- Press the Bluetooth button ③ for at least 5 seconds until the settings of the headset are reset.

Specifications

Transducer principle	dynamic, closed
Ear coupling	circumaural
Frequency response	15 – 22,000 Hz
Nominal impedance active/passive	590/100 Ω
Sound pressure level at 1 kHz and 1 Volt	107 dB SPL
THD at 1 kHz	< 0.1%
Audio connection	3.5 mm stereo jack socket
Audio adapter	¼" (6.35 mm) stereo jack plug
In-flight adapter	3.5 mm double mono jack plug
Cable length	
Audio cable	1.4 m
Charging cable	0.8 m
Weight	179 g
BA 370 PX battery pack	3.7 V; 250 mAh Lithium-Polymer
Charging time	3 hrs
Operating time	10 hrs
Operating temperature range	0°C to +40°C
Storage temperature range	–10°C to +70°C
Passive noise attenuation	25 dB

PSAI05R-050Q or SIL SSA-4P 5050F mains unit

Nominal input voltage	110 – 240 V~
Nominal input current	max. 0.2 A
Mains frequency	50 – 60 Hz
Nominal output voltage	5 V ⎓
Nominal output current	SIL SSA-4P 5050F: max. 0.5 A
	PSAI05R-050Q: max. 1 A
Operating temperature range	0°C to +45°C
Storage temperature range	–40°C to +85°C
Relative humidity	20 to 90%
Weight	approx. 61 g

Bluetooth

Bluetooth	version 2.1 + EDR
Range	up to 10 m
Transmission frequency	2.4 GHz
Transmission power	8 dBm
Profiles	HSP, HFP, A2DP, AVRCP
Codec	SBC, apt-X

apt-X audio coding

Outstanding audio quality

apt-X technology is what wireless audio has been waiting for. With apt-X audio coding, you can be assured of crisp, pure and full stereo sound. It allows you to not only hear, but experience and feel the audio as it was intended. Utilizing apt-X, **Bluetooth** can now offer wireless audio quality that is indistinguishable from the highest quality wired connection.

Professional grade sound

Until now, apt-X has been the best-kept secret of the professional audio industry. From major public broadcasters to film production studios, apt-X is used throughout the world to transmit high quality digital audio from A to Z in real-time. It was developed to meet the exacting standards of musicians and audio engineers who love the exceptional dynamic range and high fidelity it provides.

Now available on selected consumer devices, the technology ensures that music lovers everywhere can stream the rich listening experience that only apt-X can deliver.

Revolutionizing Bluetooth listening

Bluetooth technology has revolutionized our communications and lifestyle by eliminating troublesome wires and letting us get on with life ''on the move''. Listening to a mobile phone conversation on a **Bluetooth** earpiece sounds just fine but when it comes to delivering full stereo sound, a little extra help is required. apt-X works within **Bluetooth** to deliver CD quality audio, ensuring you are getting the most from your wireless listening experience.

In order to deliver two-channel digital sound within the **Bluetooth** A2DP profile, audio compression is necessary. While traditional audio compression technologies struggle to provide full-bandwidth, high-fidelity audio over **Bluetooth**, apt-X works to ensure you enjoy the fullest, richest sound your music collection has to offer.

apt-X legacy

If you have ever been to the movies or listened to the radio then chances are you'll already have heard apt-X in action. Over 20,000 radio stations across the world and thousands of cutting-edge film studios rely on apt-X for high quality audio delivery.

The digital compression technology now known as apt-X was originally developed in Queen's University, Belfast, Northern Ireland. The technology was first brought to market for radio automation applications to store CD quality audio on computer hard drives for direct playout during radio shows, hence automating the process of the disc jockey.

The acclaim the technology received lead to further research and development and throughout the 1990s the technology was used by Broadcast and Post-production studios worldwide to deliver high-fidelity, low latency audio in situations where bandwidth was limited. The same core principles that have earned apt-X worldwide acclaim in the Broadcast and Post-Production markets make it the perfect solution for delivering high quality audio on wireless devices. apt-X is leading the way in bringing pro-audio quality to the discerning consumer.

apt-X key features:

- Blind listening tests with industry reference audiences have shown that apt-X over **Bluetooth** is indistinguishable from audio delivered over wired technology. Unlike psychoacoustic-based technologies such as MP3 or AAC, apt-X can be used to transport audio without degrading the audio quality. With MPEG/AAC compression, the encoding process is destructive and content perceived as ''irrelevant'' is discarded.
  apt-X's transparent, non-destructive approach ensures that every frequency present in the original signal is preserved in the encoded and decoded signal.
- Dynamic range of > 92 dB for 16 bit audio and > 120 dB for 24 bit audio.
- The overall framework of apt-X ensures a high degree of resilience to random bit errors, with the bit error response well matched to the auditory response of the human ear. apt-X employs connection and synchronization techniques to ensure a robust connection and enable delivery of audio even under stressful conditions.
- Shortest processing delay of any professional audio compression technology. Many current wireless devices suffer from unwanted delays which cause lip-sync issues, apt-X can enable real-time delivery of wireless audio ensuring seamless integration when used with video devices.
- apt-X encoded audio fits neatly within the available bandwidth of wireless transmission standards to offer an efficient solution for bandwidth-restricted connections.

Manufacturer Declarations

Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product. For the current warranty conditions, please visit our website at www.sennheiser.com or contact your Sennheiser partner.

In compliance with the following requirements

- RoHS Directive (2002/95/EC)
- WEEE Directive (2002/96/EC)

  Please dispose of this product by taking it to your local collection point or recycling center for such equipment.

- Battery Directive (2006/66/EC)

  The supplied standard/rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries.

CE Conformity

- R&TTE Directive (1999/5/EC)
- EMC Directive (2004/108/EC)
- Low Voltage Directive (2006/95/EC)
- ErP directive (2009/125/EC)

The declaration is available on the internet at www.sennheiser.com. Before putting the product into operation, please observe the respective country-specific regulations!

Trademarks

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SENNHEISER

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Publ. 12/11, 546147/A01

MM 550-X
MM 450-X
MM 500-X
MM 400-X

Safety Guide
Sicherheitshinweise
Consignes de sécurité
Indicaciones de seguridad
Guida per la sicurezza
Veiligheidsgids
Guia de Segurança
セーフティガイド

Инструкция по безопасности
Instrukcja bezpieczeństwa
Güvenlik Kılavuzu
安全指南
安全說明書
안전 설명서
Panduan Keselamatan

SENNHEISER

Important safety instructions

- ▶ Read this safety guide carefully and completely before using the product.
- ▶ Always include this safety guide when passing the product on to third parties.
- ▶ Do not use an obviously defective product.

Preventing damage to health and accidents

- ▶ Do not listen at high volume levels for long periods of time to prevent hearing damage.
- ▶ Always maintain a distance of at least 3.94" (10 cm) between the ear cups and the cardiac pacemaker or implanted defibrillator since the product generates permanent magnetic fields.
- ▶ Keep the product, accessory and packaging parts out of reach of children and pets who could swallow smaller pieces.
- ▶ Do not use the product in an environment that requires your special attention (e.g. in traffic).

Preventing damage to the product and malfunctions

- ▶ Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation.
- ▶ Only clean the product with a soft, dry cloth.
- ▶ Switch off the product after use to conserve battery power. Remove the battery pack if the product will not be used for extended periods of time.
- ▶ Only use the product in environments where wireless **Bluetooth**® transmission is permitted.
- ▶ Only use attachments/accessories supplied or recommended by Sennheiser.

Intended use

MM 550-X, MM 450-X, MM 500-X and MM 400-X are wireless **Bluetooth** headsets that work with mobile phones or other **Bluetooth** devices/**Bluetooth** compliant devices, and allow for wireless music enjoyment or calls.

"Improper use" means using the product

- other than as described in this safety guide,
- under operating conditions which differ from those described in this safety guide.

Safety instructions for the Lithium-Polymer battery pack

If abused or misused, the battery pack may leak. In extreme cases, it may even present an explosion or fire hazard.

- Heat generation
- Fire development
- Explosion
- Smoke or gas development

Please understand that Sennheiser does not accept liability for damage arising from abuse or misuse.

Keep away from children.

Immediately remove the battery pack from an obviously defective product.

Dispose of the battery pack at special collection points or return it to your specialist dealer.

Only charge the battery pack with the appropriate Sennheiser chargers.

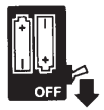
Only charge the battery pack at ambient temperatures between 10°C/50°F and 40°C/104°F.

Do not mutilate or dismantle.

Store charged battery packs so that the terminals cannot contact each other – danger of shorting out/fire hazard.

When not using the product for extended periods of time, remove the battery pack from the product.

Only use battery packs recommended by Sennheiser.



Switch battery pack-powered products off after use.

When not using the battery pack for extended periods of time, charge it regularly (about every 3 months).

Do not heat above 70°C/158°F, e.g. do not expose to sunlight or throw into a fire.

Do not continue to use a defective battery pack.

Do not expose to moisture.

Manufacturer Declarations

Warranty

Sennheiser electronic GmbH & Co. KG gives a warranty of 24 months on this product. For the current warranty conditions, please visit our website at www.sennheiser.com or contact your Sennheiser partner.

In compliance with the following requirements

- RoHS Directive (2002/95/EC)
- WEEE Directive (2002/96/EC)

Please dispose of this product by taking it to your local collection point or recycling center for such equipment.

- Battery Directive (2006/66/EC)

The supplied standard/rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries.

CE Conformity

- R&TTE Directive (1999/5/EC)
- EMC Directive (2004/108/EC)
- Low Voltage Directive (2006/95/FC)
- ErP directive (2009/125/EC)

The declaration is available on the Internet at www.sennheiser.com. Before putting the product into operation, please observe the respective country-specific regulations!

Sennheiser electronic GmbH & Co. KG

Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com

Printed in China, Publ. 12/11, 546137/A01

EN

This device complies with Part 15 of the FCC rules and RSS-210 of Industry Canada. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and RSS-210 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications made to this equipment not expressly approved by Sennheiser electronic Corp. may void FCC authorization to operate this equipment. This Class B digital apparatus complies with Canadian ICES-003.

RF Radiation Exposure Information

Since the radiated output power of this device is far below the FCC radio frequency exposure limits, it is not subjected to routine RF exposure evaluation as per Section 2.1093 of the FCC rules. This device complies with the US and Industry Canada portable device RF exposure limits set forth for an uncontrolled environment and is safe for intended operation as described in the user manual.

FR

Cet appareil est conforme à la Partie 15 des réglementations de la FCC et à la norme CNR-210 d'Industrie Canada. L'utilisation de l'appareil doit respecter les deux conditions suivantes : 1) L'appareil ne doit pas produire d'interférences nuisibles, et, 2) il doit accepter toutes interférences reçues, y compris celles qui pourraient avoir des effets non désirés sur son fonctionnement.

Cet équipement a été testé et trouvé conforme aux limites définies pour un dispositif numérique de classe B, dans le cadre de la Partie 15 des réglementations de la FCC et de la norme CNR-210 d'Industrie Canada. Ces limites sont conçues pour offrir une protection raisonnable contre les interférences nocives pour une installation résidentielle. Cet équipement produit, utilise et peut émettre une énergie haute fréquence et, s'il n'est pas installé et utilisé conformément aux instructions, provoquer des interférences gênantes pour les communications radio. Des risques d'interférences ne peuvent toutefois pas être totalement exclus dans certaines installations, même en cas de respect des instructions. Dans le cas d'interférences gênantes pour la réception des émissions de radio ou télédiffusées (il suffit, pour le constater, d'allumer et d'éteindre l'équipement), l'utilisateur est invité à prendre l'une des mesures suivantes pour les éliminer :

- Réorienter ou déplacer l'antenne réceptrice.
- Eloigner l'équipement du récepteur.
- Brancher l'équipement sur une prise ou un circuit différent de celui du récepteur.
- Consulter un revendeur ou un technicien de radio ou télévision expérimenté..

Toute modification non expressément approuvée par Sennheiser electronic Corp. peut annuler le droit de l'utilisateur à l'emploi de l'équipement en question. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Information sur l'exposition aux radiofréquencesn

La puissance RF rayonnée de cet appareil étant de loin inférieure aux limites imposées par la FCC, il n'est pas soumis à la réglementation sur l'exposition aux RF selon la section 2.1093 de la réglementation FCC. Cet appareil portatif est conforme aux limites d'exposition aux radiofréquences de la FCC et d'Industrie Canada, définies pour un environnement non-contrôlé et il ne présente aucun danger au regard de son utilisation prévue décrite dans la notice d'emploi.

Korea

해당 무선설비는 전파혼신 가능성이 있으므로 인명안전과 관련된 서비스는 할 수 없음

Sennheiser electronic GmbH & Co. KG
Am Labor 1, 30900 Wedemark, Germany | www.sennheiser.com | Printed in China, Publ. 12/11, 546142/A01

In compliance with:

	MM 550-X	MM 450-X	MM 500-X	MM 400-X
USA	FC FCC ID: DMOCBSSAB			
Canada	IC: 2099A – MMBTX			
Europe	CE 0889 CE			
Australia/New Zealand	N340			
Singapore	Complies with IDA Standards DB100582			
Russia	ME10			
Korea	KCC-CRM-SE9-MM550-X	KCC-CRM-SE9-MM450-X	KCC-CRM-SE9-MM500-X	KCC-CRM-SE9-MM400-X

Statements regarding FCC and Industry Canada/ Déclaration requise par la FCC et l'Industrie Canada

FCC Declaration of Conformity (DoC)

FC SENNHEISER
Model No: MM 550-X, MM 450-X
MM 500-X, MM 400-X

We, Sennheiser Electronic Corporation
One Enterprise Drive • Old Lyme •
CT 06371 • USA
Tel: +1 (860) 434 9190, ext. 144
Fax: +1 (860) 434 1759

declare the above device comply with the requirements of Federal Communications Commission.

This device complies with Part 15 of the FCC rules. Operation is subjected to the following two conditions:
1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: John Falcone

MM 550-X
MM 450-X
MM 500-X
MM 400-X

Instruction manual

546140
12/11

SENNHEISER

Enjoy music and never miss a call

Musik genießen und keinen Anruf verpassen /
Savoure ta musique et ne rate jamais un appel

PREMIUM WIRELESS HEADSET
KABELLOSES PREMIUM-HEADSET
OREILLETTE SANS FIL HAUT DE GAMME

MM 500-X

MUSIC ◀◀ ▶▶ CALLS

SENNHEISER

MM 500-X

2 YEAR WARRANTY • JAHRE GARANTIE • ANS DE GARANTIE

High-performance microphone

Hochleistungsmikrofon /
Microphone haute performance /
Micrófono de alto rendimiento /
Microfono ad alte prestazioni /
Microfoon met hoog prestatievermogen /
Microfone de desempenho elevado

Soft XL ear pads for excellent comfort

Soft XL-Ohrpolster für hervorragenden Tragekomfort /
Coussinets d'oreille doux XL pour un excellent confort /
Suaves almohadillas XL para una máxima comodidad /
Morbidi cuscinetti auricolari XL per il massimo comfort /
Opvouwbaar, met metaal versterkte hoofdband /
Redução eficaz do ruído em ambientes ruidosos

True Hi-Fi wireless quality sound with apt-X

Funkübertragung mit echter Hi-Fi-Klang-qualität durch apt-X /
Son fidèle, de qualité, Hi-Fi, sans fil avec apt-X /
Auténtico sonido Hi-Fi inalámbrico con apt-X /
Vera qualità audio hi-fi wireless con apt-X /
Draadloos geluidsgenot met geluid in hifi-kwaliteit dankzij apt-X /
Som autêntico de alta fidelidade sem fio com apt-X

Exchangeable battery

Austauschbarer Akku /
Accu interchangeable /
Batería reemplazable /
Batteria intercambiabile /
Vervangbare batterij /
Bateria substituível

Easy control of music and calls

Einfache Bedienbarkeit der Musik- und Telefon-Funktionen /
Contrôle facile de la musique et des appels /
Control sencillo de la música y las llamadas /
Comando facile per musica e chiamate /
Eenvoudige regeling van muziek en gesprekken /
Fácil controlo de música e chamadas

Foldable / Faltbar / Pliable

Technical data / Technische Daten / Caractéristiques techniques

10 h/3 h	179 g	≤ 10 m	15 - 22,000 Hz*2	V2.1 + EDR
Play-/ Charging time Betriebs-/ Ladezeit Autonomie / Temps de charge	**Weight** Gewicht Poids	**Range** Reichweite Portée	**Frequency response**[*2] Übertragungsbereich[*2] Réponse en fréquence[*2]	**A2DP, AVRCP, hands-free** Freisprecheinrichtung Sans fil

*1 The use of *Bluetooth*® (BT) devices may be prohibited on certain commercial aircrafts. Always check with your airline before using this product in BT mode!

*2 The Bluetooth system will reduce this bandwidth

SENNHEISER

www.sennheiser.com

MM 500-X

Accessories included:
inkl. Zubehör:
Accessoires inclus :

USB wall charger for US, EU, UK and AU /
USB-Ladegerät für US, EU, UK und AU /
Chargeur mural USB compatible aux États-Unis, en Europe, au Royaume-Uni et en Australie

USB charging cable /
USB-Ladekabel /
Câble de charge USB

In-flight adapters /
Adapter für Kopfhöreranschlüsse in Flugzeugen / Adaptateurs pour les connecteurs audio des cabines d'avion

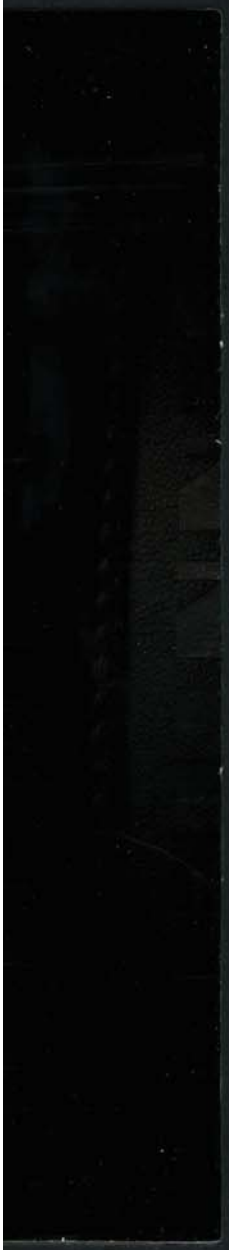
Audio cable /
Audiokabel /
Câble audio

Carrying case /
Tragetasche /
Etui de transport

Quick guide and manual /
Kurzanleitung und Bedienungsanleitung / Guide rapide et mode d'emploi

SENNHEISER

MM 500-X



Give your phone the sound it deserves

Gib deinem Telefon den Sound, den es verdient

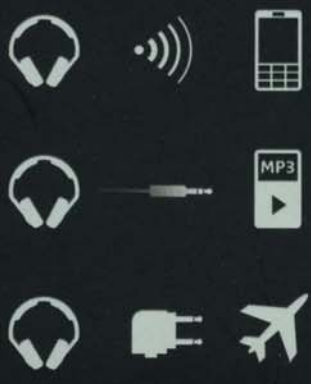
Donnez à votre téléphone le son qu'il mérite

Works with any Bluetooth® enabled phone

Kompatibel mit allen Bluetooth-fähigen Telefonen

Compatible avec tous les téléphones Bluetooth

Connect everywhere
Anschluss immer und überall
Connectez-vous partout



UPC

6 15104 22774 3

0621

05115500174

SENNHEISER

EAN

4 044155 077872

Designed and Engineered in Germany
www.sennheiser.com

Sennheiser is a trademark of Sennheiser electronic GmbH & Co. KG

Sennheiser electronic GmbH & Co. KG,
Am Labor 1, 30900 Wedemark, Germany

Made in China

MM 500-X

Ord.No./Art.Nr./N° Réf. [redacted]

KCC-CRM-SE9-MM500-X

N340

CE 0889

Complies with
IDA Standards
DB100582

This device complies with Part 15 and with RSS-210 of the FCC rules of Industry Canada. Operation is subjected to the following two conditions:
1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital aparatus complies with Canadien ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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aptX is a trademark of CSR plc.

[redacted]

How to open /
Öffnen der Verpackung /
Comment ouvrir